Poverty Trends and Analysis

**Definition of Poverty**: Poverty is a state or condition in which a person or community lacks the financial resources and essentials for a minimum standard of living. Poverty means that the income level from employment is so low that basic human needs can't be met. Poverty-stricken people and families might go without proper housing, clean water, healthy food, and medical attention.

Every year 17th October is observed as **International Day for the Eradication of Poverty**.

1. It was started in 1992 with the adoption of UN resolution.
2. Theme for 2020 is "**Acting Together to Achieve Social and Environmental Justice for All**".

**Features**

1. **Poverty Trends**: More than 90% countries have reported a dip in per capita income because of Covid-19.
   a. More than 115 million new poor have been added to the world, and their spread is universal, from rich Europe to the already poor Asia and from rural to urban areas.
   b. According to the latest Poverty and Shared Prosperity Report by World Bank, Covid-19 pandemic is estimated to push an additional 88 million to 115 million people into extreme poverty this year, with the total rising to as many as 150 million by 2021.
2. **Not just Income Poverty**: India and Nigeria are two countries that host the world’s largest number of poor. Here, the poor live in very ecologically fragile areas. This makes poverty not just an income related aspect as economists and politicians consider.
3. **The Ecology of Poverty**:
   a. In India, the poorest regions are invariably the forested areas of the country in states like Chhattisgarh, Jharkhand and Madhya Pradesh.
      i. Some 275 million people in India depend on forest for subsistence. In the country’s poorest regions, forests provide
up to 30% of their total income. This is more than agriculture and other sources of income.

b. At the global level, just 5 countries—India, Bangladesh, Nigeria, Ethiopia and the Democratic Republic of Congo—account for half of the extreme poor in the world. Paradoxically, the above five countries, barring Congo, are also witnessing rapid economic growth.

c. Various estimates say the natural capital accounts for 9% of wealth globally, but it accounts for 47% of the wealth in low income countries. This shows the dependence of people on natural resources in developing and poor countries.

4. Ecology and Entitlement: According to the International Union of Forest Research Organizations, forestry contributes at least $539 billion directly to the World GDP.

a. Development has come with a heavy cost to the ecology. For instance, the latest Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services global assessment reported a decline in nature’s contributions to people since 1970. It clearly said that “extraction of provisioning services has increased, while provision of regulating and maintenance services has declined”.

b. According to a study by UNEP (covering 140 countries), the globally produced capital per head doubled and human capital per head increased by about 13%, but the value of the stock of natural capital per head declined by nearly 40% in 1992-2014.

c. It means those who depend on the environment witnessed a decline in their assets thus triggering poverty.

5. Poverty and Forest Dependence: A Food and Agriculture Organization (FAO) study shows that more than a billion people are forest-dependent, and most of them are below the poverty line. Most of them are in Africa and Asia.

6. The Geography of Poverty: The more the reliance on ecology/nature for survival, higher is the probability to be poor due to modern urban development.

i. Regional Shift: In 1990, half of the world’s poor lived in East Asia and the Pacific. At present, sub-Saharan Africa and South Asia host over 85% of the poor in the world. Further, 26 of the world’s 27 poorest countries are in sub-Saharan Africa.

ii. In these regions, three-fourths of the total poor live in rural areas.

iii. These places have a highly degraded ecology (due to increasing
exploitation of natural resources for development). Most of the poor depend on natural resources like land, forests and livestock for survival. So, for them, the economy is all about ecology. Degradation of the ecology, thus, leads to poverty.

**Way Forward**

- The importance of ecology to overall world development including poverty eradication can be gauged from the fact that 86 out of 169 SDGs targets directly or indirectly seek to reduce environmental damage or emphasize the critical role of natural resources and ecosystem services.
- The deadline of “eradicating poverty” in all forms is just 10 years away (as per the SDG 2030 target). To achieve this goal itself makes “social and environmental” justice as the key to our poverty eradication plans and programmes.
- There are various reasons for environmental degradation that ultimately trigger poverty among the nature-dependent people. Climate change is the latest major factor.
- We need to focus on the ecological dimension of poverty also. When income comes from ecology, access to it becomes the sole way to eradicate poverty. Both access and entitlement for nature dependent people remains a key focus for poverty eradication.

Source: IE
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Source: IE
India has assumed the Chairmanship of Governing Body of ILO

GS-II | 24 October, 2020

Apurva Chandra to Chair of ILO Governing Body

INTERNATIONAL LABOUR ORGANISATION (ILO), 1919

- It was 1 of the 1st organizations to deal with labour issues. ILO was established as an agency of League of Nations following the Treaty of Versailles (after WW1).
- It is the only tripartite U.N. agency. It brings together governments, employers and workers of 187 member States, to set labour standards, develop policies and devise programmes.
- HQ at Geneva.

Structure of ILO

International Labour Conference: It sets the International labour standards and the broad policies of the ILO.
Governing body: It is the executive council of the ILO. It takes policy decisions of ILO.
International Labour Office: it is the permanent secretariat of the ILO.

Functions of ILO:

- Solve labour issues, create policies, programmes, standards and recommendations;
- Human rights protection (Right to work, association etc); Research and Publication.
- ILO does not impose sanctions on Govt though it registers complaints against entities.
- India is the founding member since 1922. In India, the first ILO Office was started in 1928.

- India has ratified 6 out of 8 core ILO Conventions.

  Forced Labour Convention (No. 29)
  Abolition of Forced Labour Convention (No.105)
  Equal Remuneration Convention (No.100)
  Discrimination (Employment Occupation) Convention (No.111)
  Minimum Age Convention (No.138)
  Worst forms of Child Labour Convention (No.182)

The Indian Labour Conference (ILC):

- ILC is the apex level tripartite consultative committee in the MoLE to advise the Govt.
- ILC recommendations to fix minimum wages
  1. 3 consumption units for one earner.
  2. Minimum food requirements of 2700 calories per average Indian adult.
  3. Clothing requirements of 72 yards per annum per family.
  4. Rent corresponding to the minimum area provided for under Government’s Industrial Housing Scheme.
What is the news?

- Labour & Employment Secretary **Apurva Chandra** has been elected as the Chairperson of the Governing Body of the ILO for the period October 2020-June 2021.
- The Chairperson of the Governing Body of ILO is a position of international repute. The Governing Body (GB) is the apex executive body of the ILO.
- GB meets thrice a year, in March, June and November. It takes decisions on ILO policy, decides the agenda of the International Labour Conference, adopts the draft programme and budget of the organisation for submission to the conference, and elects the Director-General.
- The broad policies of the ILO are set by the International Labour Conference, which meets once a year in June, in Geneva, Switzerland.
- Chandra will be presiding over the upcoming Governing Body’s meeting, to be held in November 2020.
- It will provide a platform to apprise participants of the transformational initiative taken by the government in removing the rigidities of the labour market, besides making intention clear about the universalisation of social security to all workers in the organised or unorganised sector.
- The four codes on wages, industrial relations, social security and occupational safety, health and working conditions are expected to improve ease of doing business and safeguard the interest of workers.

Source: PIB
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Source: PIB
India’s First Seaplane Project

- A seaplane is a fixed-wing aeroplane designed for taking off and landing on water.
- There are two main types of seaplanes: flying boats (often called hull seaplanes) and floatplanes.
- India's first seaplane service in Gujarat, is set to start from 31st October 2020, the birth anniversary of Sardar Vallabhbhai Patel, with the aim of providing air connectivity between the Sabarmati Riverfront in Ahmedabad and the Statue of Unity in Kevadia.
- The seaplane will be operated by SpiceJet. It is a 19-seater seaplane, which will be able to accommodate 14 passengers.
- In the next phase, Dharoi dam (Mehsana district) will connect Ambaji and Shatrunjay dam (Bhavnagar district) and Tapi district.

UDAN (Ude Desh ke Aam Nagrik), 2016

- It is a regional connectivity scheme to develop smaller regional airports to allow easier access to aviation services. It is a part of National Civil Aviation Policy (NCAP).
- Objectives
1. Operationalization and development of 425 underserved and unserved airports.
2. Boost inclusive economic development by faster connectivity.
3. Development of air transport infrastructure in remote areas.

- It is funded jointly by Center and States. Duration is of 10 years. Airlines are selected through competitive bidding process.
- Center will provide VGF, concessional GST on tickets, etc.
- State will provide land for airport, trained security personnel, 20% of VGF. VGF is not given to cargo airlines.
- Exclusivity for 3 years in routes. 2500 per 1 hour flight.

**UDAN Phase 1.0 to 4.0**

- UDAN 1.0: Under this phase, 5 airlines companies were awarded 128 flight routes to 70 airports (including 36 newly made operational airports)
- UDAN 2.0: In 2018, the MoCA announced 73 underserved and unserved airports. For the first time, helipads were also connected.
- UDAN 3.0: Inclusion of Tourism Routes in coordination with the Ministry of Tourism. Inclusion of Seaplanes for connecting Water Aerodromes. Bringing in a number of routes in the North-East Region.
- UDAN 4.0: seeks to offer priority routes connecting Bilaspur and Ambikapur airports in Chattisgarh.

**International UDAN Scheme**

- It is an extension of UDAN to connect India’s smaller cities to some key foreign destinations in neighborhood.
- It will utilise Open Skies policy which India and Asian countries allow direct and unlimited flights to 18 Indian destinations.

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**Abortion Laws in Poland**

- Recently, women in Poland have been protesting a court ruling that drastically restricts their right to access safe and legal abortions.
- The existing 1993 abortion law of Poland permits the termination of pregnancy on the grounds of foetal defects.

Source: IE
These are already considered some of the strictest laws in Europe and after the enactment of the court’s decision, abortions will only be permitted in cases of rape, incest, or if there is a threat to the mother’s life.

Abortion Law = Medical Termination of Pregnancy Bill, 2020 amends MTP Act, 1971

- It is related to abortion, procedures and conditions of abortion. India does not allow free abortions, only when there is a risk of life or substantial abnormalities of child. Hence certification of Medical practitioner.
- Contradiction of PCPNDT Act, < 18 years allowed to terminate, child diagnosed with diseases after 20 weeks, sometimes rape victims and minors also there. Hence, Amended.

1971 Act and 2020 Bill

- If substantial physical and mental injury to child, or if pregnancy risks or is a grave injury to life of mother, then she can abort.
- If < 20 weeks (earlier 12) 1 Medical practitioners. If it is in between 20 to 24 weeks (earlier 12 to 24), 2 Medical practitioners. If > 24 weeks then Medical Board's permission.
- State Govt can make rules. Bill amends this provision to replace 'married woman or her husband' with woman or her partner.
- Pregnant women with the approval of Medical Board constituted by State govt but rules should be notified by Center. Termination of pregnancy > 24 weeks. It consists of gynacologist, pediatrician, sonographer, radiologist and as per State Govt.
- Privacy: Her identity should not be disclose except to a person who is authorised by the law. If breach then penalty of 1 year or fine or both.
- MTP Act divides it regulatory framework for allowing abortions into categories, according to Gestational age of foetus.

Issues in 1971 Act:

- Reports show that > 10 women die everyday due to unsafe abortions in India and backward abortion laws only contribute to women seeking illegal and unsafe options.
- In 2008, a petition was filed by Haresh and Niketa. Mehta to abort in 22 week.
- High Court does not provide women in final say unlike 67 countries where women can get an abortion on request with or without a specific gestation limit (usually 12 weeks).
- Prejudice against unmarried women - According to Section 3 (2) pregnancy because of failure of any birth control device
- Issue is that some child's abnormalities is found > 20 weeks.

Still Issues in 2020 Bill

- It does not allow abortion on request at any point after pregnancy.
- It doenst take a step towards removing the prejudice against unmarried women.
It enhances the gestation limit from 20 to only 24 weeks in certain cases of women like rape survivors, victims of incest and minors.

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GS-I | 25 October, 2020

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It enhances the gestation limit from 20 to only 24 weeks in certain cases of women like rape survivors, victims of incest and minors.

Source: IE
What is the issue?

- Recently, Facebook India’s policy head has appeared before the 30-member Joint Committee of Parliament which is examining the draft Personal Data Protection Bill, 2019.
- However, Amazon has declined to appear on the ground of risky travel amidst the pandemic.
- Amazon, Twitter, Facebook, Google and Paytm are among the companies from whom the committee has sought views on data security and protection amid concerns that the privacy of users is being “compromised” for commercial interest.
- Facebook was interrogated on how it targets audiences, their data storage model and transfer of data, etc.
- Amazon’s refusal amounts to a breach of parliamentary privilege and the panel is unanimous about taking coercive action if no one from the company appears on the next date.

Draft Protection Data Protection Bill, 2019

- Private Companies and State agencies has vast amount of data. There is no legal framework for data protection. Even the individuals dont know that their data is being used. Thus, there was a need for legislation which was also said by K S Puttaswamy case, 2018 that held Right to Privacy (Art 21) to be a Fundamental Right.
- Against this backdrop B N Srikrishna Committee (on Data Protection) prepared Personal Data
Protection Bill, 2018 to MEITy. It deals with the guidelines for collection, storage, and processing of personal data, consent of individuals, penalties & compensation and a code of conduct.

Terms

- Data is the large collection of info about Data Principal (individuals) stored in a computer.
- Data is collected and handled by Data Fiduciaries (like FB). Fiduciary controls how and why the data is processed.
- Data Processing is analysis of data to collect patterns, turn raw data into useful. This is done by a 3rd party Data Processor (like Cambridge Analytica).
- The physical attributes of data, where data is stored, where it is send and where it is turned into something useful are Data Flows. It determine who has the access to data, who profits off it, who taxes and who owns it.
- Data Localisation is the act of storing data on any device physically present within the borders of the country.

Provisions of the Bill

- It requires all Fiduciaries to store copy of all personal data in India.
- Bill trifurcates the data and mandates the storage in India depending on the type of data

1. Personal Data: Identifies the individual like Name, address etc.
2. Sensitive Personal Data:passwords, financial data, Health data, sex life, sexual orientation, biometric data, genetic data, transgender status, intersex status, caste or tribe, and Religious or political belief or affiliation. Such data can be processed only with explicit, informed, clear & specific consent of person. This is to be stored only in India. It can be processed abroad only in certain conditions including approval of Data Protection Agency (DPA).
3. Critical Personal Data: Anything that Govt may deem critical. Like Military or National Security Data. Both stored and processed only in India.

- Bill removes the requirement of data mirroring (personal data). Individual consent is required for data transfer.
- Fiduciaries must provide Govt non personal data when demanded. It includes anonymised data like traffic patterns, demographic data.
- It requires Social media companies to develop their own user verification mechanism.
- Data Protection Authority of India (DPAI) to be set up (headed by a Chairperson and <= 6 whole time members) to monitor and enforce provisions of the Act.
- Adjudicating Officers in the DPA. Adjudicating decisions can be appealed in the appellate tribunal. Appeals from the tribunal will go to Supreme Court.
- Each Company will have a Data Protection Officer (DPO) for auditing, grievance redressal, maintenance etc.
- It proposes Purpose Limitation and Collection Limitation clause which limit the collection of data to what is needed for clear, specific and lawful purposes.
- It grants individuals right to data portability and ability to access and transfer one’s own data.
- It legislates on the Right to be Forgotten, right to restrict or prevent continuing disclosure of personal data. This has roots in EU law of GDPR (General Data Protection Regulation).
- Bill also states Penalties: Minor violations (5 crore or 2% of turnover) and Major (15 crore and 4% turnover).

Advantages
1. Data Localisation can help law Enforcement agencies. Much of cross border data transfer is governed by individual bilateral mutual legal assistance treaties.
2. Instances of cyber attacks and surveillance will be checked. Recent Pegasus incident on Whatsapp.
3. Fake news which leads to lynching, national security threats can be monitored now.
4. Ability to tax Internet giants.
5. It will help to enforce data sovereignty.

Disadvantages

1. The Bill focuses on consent of the person but it also gives powers to Government to dilute these provisions for Govt agencies.
2. The powers given to Govt makes the gains from K S Puttaswamy case (Right to Privacy as a part of life and liberty) meaningless.
3. Recent incidents of Israeli spyware Pegasus and Google alerting 500 Indian users regarding "government backed" phishing attempts, the Indian government has still not provided answer.
4. Even the B N Srikrishna has used "Orwellian" and "Big brother" in response to removal of safeguards for Govt agencies.
5. It said that the dangers to privacy is from state and non state actors both and hence the exemptions should be "narrow" and for use in "limited circumstances".
6. DPAI is selected by a panel filled with Govt nominees disregards the fact that Govt agencies are also regulated under the Act; they are major collector and processor of data themselves.
7. Even if data is stored in India, encryption keys may be out of the reach of national agencies. The terms National Security are open ended.
8. FB, Google fear that this data localisation norms will have a domino effect in other countries.
9. It may backfire India's own startups attempting for global presence.

Source: TH

International Monetary Fund (IMF)

GS-II | 26 October, 2020
• HQ is Washington DC. Head is Kristilina Georgiva.
• India is a founding member. 189 members.
• IMF is a cooperative institution.

Functions of IMF

1. Majorly for exchange rate stability, deciding exchange rate, distinctions between hard and soft currency, issuing paper gold and SDR mainly to tackle crisis.
2. Responsible for predicting World GDP, growth rate, both for developed and developing countries separately.
3. IMF works to control inequality and mainstream women.
4. **WB membership is important for IMF.**
5. Reports
   1. World Economic Outlook

Working areas
1. Surveillance and Finance and tech assistance to counter to meet out BoP crisis.
2. Even IMF provides economic assistance to members to promote trade and issue SDR.
3. Weightage in SDR: $ (42%) > Euro (31%) > Remnibi (10%) > Yuan (8%) > Pound (8%).
4. IMF is managed by Board of Governors. Each member countries nominates a Governor.
   Every country also nominates alternative governor to cast a vote in Governor's absence.
5. Although the IMF is an agency of the United Nations, it has its own charter, structure and
   financing arrangements.

Voting pattern

1. Each Governor is allocated with number of votes = Quota given as per country
   contribution along with total capital with IMF.
2. Each Govt gets the right to do with 50 voters and 1 additional vote for each SDR per 1
   lakh quota.
3. Combination of both = voting share of a country.
4. Quota is supposed to be deposited partially into their own and rest in Forex and Gold.
5. Quota Formula = Weighted average of GDP = 50%; Openness of Economic viability and
   International Reserves.
6. Largest Quota is of USA > Japan > China > Germany > UK > France > Italy > India > Russia.

Aims

1. Promote International Monetary cooperation.
2. Facilitate expansion and Balanced growth of International trade.
4. Assist in establishment of multilateral system of payment.
5. Make its general resources temporarily available to its members to solve BoP crisis.
   Lessen delay of disequilibrium of BoP crisis of member countries. It also gives Emergency
   Loans provided they reform their economic policies.
6. NOTE: But they dont give loans to Grey and Black list of FATF.
7. Till 1971 all Quota and assistance were in the form of $ but to decrease dependence on $
   IMF introduced SDR or Paper Gold. 1 SDR = 1.55 $.
8. Financial Year of IMF is 1 May to 30 April. RBI's FY is July to June.
9. IMF also lend more to countries by funding their Poverty eradication and growth
   programmes
10. IMF Lending Facilities (to solve BoP crisis by meeting out problem of Forex needs):
    Extended Fund Facilities; Standby Facilities; Contingent Credit Line and Compensatory
    Facilities.

International Monetary and Financial Committee

- It is the Ministerial-level committee of the International Monetary Fund (IMF).
- It meets twice a year. This year it met through videoconference.
- It advises IMF and discusses the management of the international monetary and financial
  system.
- IMFC has 24 members. India is one of the current members. It operates on consensus,
Bretton Woods Project:

It was established in 1995 by the UK-based Bond Development and Environment Group (DEG) to support civil society to monitor the negative developmental impacts of World Bank and IMF policies and activities.

Criticism of IMF

IMF Loans comes with conditionalities imposed on borrower countries based on Washington Census, focusing on liberation of trade, investment and financial sector, deregulation and privatization of nationalised industries. They fail to make it country specific and coerce poor countries. This has led to economic problems and underdevelopment.

Issue of climate finance: The IMF has been accused of financing unsustainable carbon-intensive developmental projects. Hence, there is an increasing call from environmental activists that the WB and IMF should finance only carbon-neutral sustainable development projects. There are also concerns related with the accountability of the projects run by them especially in the Third World countries.

The IMF have also been criticised for being western-dominated undemocratic bodies because they represent the largest donors.

The IMF has quota system which is yet to give adequate weightage to the emerging economies like India, China and Brazil despite their increased economic importance in contemporary times.

The global economic centre of gravity has shifted from the “global North” to the “global south”. But these Brettonwoods institutions are yet to realise that even though there has been the formation the BRICS bank and the AIIB.

Because of overdomination of USA and EU in IMF, BRICS in Fortaleza summit came up with New Development Bank as a alternative to IMF. 1st Head = K V Kamath

Conclusion:

Many of the criticisms aimed against the WB and IMF are historical and may not hold true in contemporary times. The two institutions are trying to reorient themselves. The internal assessment has also been catalysed by the geopolitical and geo-economic impact of the BRICS bank and the AIIB as a challenge to the Bretton Woods institutions. Hence, the national governments should undertake a calibrated economic liberalization maintaining the due autonomy of their decisionmaking to have a win-win situation.

Source: IMF Website
Compound Interest Waiver on Moratorium Loans

What is Compound Interest Waiver Scheme?

- Under this, the government will grant eligible borrowers ex-gratia payment of the difference between the compound interest and simple interest for the six-month moratorium period.
- Ex-gratia payment is the money which is paid due to moral obligation and not due to legal obligation.
- Simple interest is levied only on the principal amount of a loan or deposit. In contrast, compound interest is levied on the principal amount and the interest that accumulates on it in every period.
Festive respite

Banks will credit compound interest levied on loans up to ₹2 crore between March 1 and August 31 back to borrowers by November 5

**LOANS COVERED:**
- Home
- Education
- Consumer durables
- Automobiles
- Credit card dues
- Loans to micro, small and medium enterprises

**CONDITION:** Aggregate of all outstanding loans must not exceed ₹2 crore
- Eligible borrowers will get benefit irrespective of whether they availed the moratorium or not
- Lenders have been asked to set up grievance redressal system for the scheme within a week
- The government will reimburse banks and NBFCs after they credit loan accounts and submit claims

**Eligibility:**
- The scheme shall be applicable for loans availed by Micro, Small and Medium Enterprises (MSMEs) as well as loans to retail customers for education, housing, consumer durables, automobiles, provided a borrower has an aggregate outstanding loan of Rs. 2 crore or less, from all such loans.
- Credit card dues have also been included in the scheme’s ambit.
- The loan interest waiver payment shall be admissible, irrespective of whether the borrower had availed the moratorium partly, fully, or not at all.
- However, this would only be permitted for loan accounts that had not been reported as Non-Performing Assets (NPAs) as on 29th February 2020.
- A loan is recorded as a non-performing asset or NPA, 90 days after repayments become overdue.

**What is the news?**
Recently, the Government of India has announced the scheme for the waiver of compound interest that was payable by the borrower who had opted for loan moratorium between 1st March 2020, and 31st August 2020.

The Reserve Bank of India (RBI) had in March 2020 offered a three-month moratorium on loans, enabling borrowers to defer repayments on EMIs and other loans. This was later extended by another three months, till 31st August 2020.

The loan moratorium, and waiver of compound interest, was aimed at providing borrowers relief amid the economic impact of the Covid-19 pandemic.

Impact:

- The amount saved through loan interest waiver will be very small. This is because only the interest that would have been charged on the interest of the original loan during the six months moratorium period is waived off.
- In other words, the loan repayment will continue and one will still need to pay the simple interest that would have paid if not opted for the loan moratorium.
- It is only the compounding interest that goes off.

Implementation:

- Lenders have been asked to set up a grievance redressal mechanism for eligible borrowers under the scheme by 30th October 2020.
- A mechanism has also been put in place for lenders to claim the amount back from the government. Lenders have to submit claims for reimbursement by 15th December 2020 through a special cell set up in the State Bank of India (SBI).

Source: TH
Central Vigilance Commission

- CVC is the apex vigilance institution, free of control from any executive 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.
- It is an independent body and is only responsible to the Parliament.
- It 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.

What is the news?

- Recently, the Central Vigilance Commission (CVC) has amended the Standard Operating Procedure (SOP) on adoption of “Integrity Pact” in government organisations for procurement activities.
The latest order revises the SOP issued in January 2017. The CVC also restricted the maximum tenure of Integrity External Monitors (IEMs) to three years in an organisation.

**Integrity Pact**

- Integrity Pact is a vigilance tool that envisages an agreement between the prospective vendors/bidders and the buyer, committing both the parties not to exercise any corrupt influence on any aspect of the contract.
- The pact also ensures transparency, equity and competitiveness in public procurement.

**Integrity External Monitors**

- The IEMs independently and objectively review the documents to determine if the parties have complied with their obligations under the pact.
- They may submit a report to the chief executive of the organisation concerned or directly to the Chief Vigilance Officer (CVO) and the CVC, if they find serious irregularities attracting the Prevention of Corruption Act, 1988 provisions.

**Features**

**Choice of IEM:**

**Earlier Provision**

- Under the 2017 order, the officials who had retired from positions of the level of Additional Secretary to the Central government and above, or equivalent pay scale, were eligible for the PSUs, board level officers in Schedule 'A' companies, PSBs, insurance companies and financial institutions.
- Officers of the Armed Forces who had retired from the rank equivalent to Lieutenant-General and above were considered for appointment.

**Amended Provision**

- It states that the choice of IEM should be restricted to officials from the government and Public Sector Undertakings (PSUs) who have retired from positions of the level of Secretary to the Central government or of equivalent pay scale.
- The officials who retired as Chairman and Managing Directors (CMDs) of PSUs — Schedule 'A' companies and CMD/Managing Director and Chief Executive Officer levels in the Public Sector Banks (PSBs), insurance companies and financial institutions — should be at least of the level of Additional Secretary or its equivalent.
- Officers of the Armed Forces who have retired from the rank equivalent of General may also be considered for appointment.
- Preference would be given to persons who have worked in any other sector, other than their own, or have worked as Chief Vigilance Officer (CVO) in any organization.

**Appointment as IEM:**
Earlier Provision: Under the 2017 order, the panel could include those already in the panel maintained by the CVC, or they could propose names of other suitable persons.

Amended Provision: It states that for appointment as IEM, the Ministry, department or organisation concerned has to forward a panel of suitable persons to the CVC, of those persons who are in the panel maintained by the CVC.

Tenure:

Earlier Provision: The 2017 order stated that the initial tenure of IEM would be three years which could be extended for another term of two years on a request received by the CVC from the organisation concerned.

Amended Provision: It states that the IEM will be appointed for a period of three years in an organisation.

Source: TH
Ramsar Convention or Convention on Wetlands of International Importance

- It is an intergovernmental treaty for conservation and wise use of wetlands and their resources.
- It was adopted in 2 Feb, 1971 (Thus World Wetlands Day) in the Iranian city of Ramsar (Caspian Sea) and came into force in 1975. (WNBSR also in 1971)
- It is the only global environmental system treaty that deals with a particular ecosystem.
- Criteria for Wetlands of International Importance

1. If it has a unique, rare example of natural wetland type.
2. If it supports vulnerable, endangered or critically endangered species or threatened ecological communities.
3. If it supports plant or animal species important for maintaining biodiversity of a region.
4. If it regularly supports > 20000 waterbirds or 1% of individuals in 1 species or subspecies of waterbird.
5. If it supports a significant proportion of indigenous fish subspecies; if it is an importance
source of food for fishes, spawning ground, nursery and migration path.
6. It is an important source of food and water resource, increased possibilities for recreation and eco-tourism, imporved scenic and educational values.

- Chilika lake was designated the first Ramsite in India in 1981. Sundarbans = largest Ramsar site.

**Sundarbans declared as the Ramsar Wetland:**

1. Sundarbans = 10000 sq km 60% in Bangladesh. It covers ~ 43% of Mangrove forests of India.
2. It is the largest tidal halophytic mangrove forest in the world.
3. It is located in delta region of Padma, Meghna and Brahmaputra river basins.
4. West Bengal has 2 Wetlands now = East Kolkata Wetlands & Sundarbans (which has now become the largest Ramsar Site in India).
5. The Sundarbans was made a UNESCO World Heritage Site in 1987.
6. They are the only mangrove habitat which supports a significant population of Royal Bengal Tigers, and they have unique aquatic hunting skills.
7. It is home to critically endangered northern river terrapin (Batuga, Basaka), the endangered Irrawaddy dolphin, and the endangered fishing cat. It also has Chital Deer, Crocodile & Snakes.
8. It met 4 out of 9 criteria of Ramsar: presence of rare species and threatened ecological communities, biological diversity, significant and representative fish and fish spawning ground and migration path.
9. The part of the Sundarban delta, which lies in Bangladesh, was accorded the status of a Ramsar site in 1992.

**10 more wetland added to Ramsar wetland. Now there are 37 in total.**

- Nandur Madhameshwar (1st in Maharashtra);
- Keshopura, Miani, Beas Conservation, Nangal in Punjab;
- Nawabganj, Parvati, Agra, Saman, Samaspur, Sandi, Sarsai Nawar in UP.
- UP has the maximum in number.
- Lakshadweep has the largest % of Wetlands followed by AN. Gujarat has the highest % Statewise.

**2 more Ramsar sites added: Now the total Ramsar sites in India is 39**

- Kabartal Wetland (Bihar) and Asan Conservation Reserve (Uttarakhand) have been designated as Ramsar sites, making them ‘Wetlands of International Importance’.

**Kabartal Wetland:**

- Also known as Kanwar Jheel, it covers 2,620 hectares of the Indo-Gangetic plains in the Begusarai district of Bihar.
- It acts as a vital flood buffer for the region besides providing livelihood opportunities to local communities.
Significant biodiversity is present, with 165 plant species and 394 animal species recorded, including 221 bird species. It is also a valuable site for fish biodiversity with over 50 species documented.

It is an important stopover along the Central Asian Flyway, with 58 migratory waterbirds using it to rest and refuel.

Five critically endangered species inhabit the site, including three vultures – the red-headed vulture (Sarcogyps calvus), white-rumped vulture (Gyps bengalensis) and Indian vulture (Gyps indicus) – and two waterbirds, the sociable lapwing (Vanellus gregarius) and Baer’s pochard (Aythya baeri).

Major threats to the Site include water management activities such as drainage, water abstraction, damming and canalization.

Asan Conservation Reserve:

- ACR is a 444-hectare stretch of the Asan River running down to its confluence with the Yamuna River in Dehradun district of Uttarakhand. It is Uttarakhand's first Ramsar Site.
- The damming of the River by the Asan Barrage in 1967 resulted in siltation above the dam wall, which helped to create some of the Site’s bird-friendly habitats.
- These habitats support 330 species of birds including the critically endangered red-headed vulture (Sarcogyps calvus), white-rumped vulture (Gyps bengalensis) and Baer’s pochard (Aythya baeri).
- Other non-avian species present include 49 fish species, one of these being the endangered Putitora mahseer (Tor putitora). Fish use the site for feeding, migration and spawning.

Montreux Record

1. It is a register of wetlands maintained as a part of Ramsar Sites where changes in the ecological character have occurred or are occurring as a result of technological developments, pollution or human influence.
2. 2 Sites from India included in this are Keoladeo National Park, Rajasthan and Loktak Lake, Manipur.

National Wetland Inventory and Assesment:

- The 1st scientific national inventory of wetlands in India was carried out by Space Applications Center (ISRO), Ahmedabad at the behest of MoEF.
- Lakshadweep has the largest % of Wetlands (96.12%) followed by A&N. Gujarat has the highest % (statewise).

National Wetland Conservation Programme (NWCP), 1985-86

- Under this programme, 115 wetlands have been identified which needs urgent conservation.
Objective of NWCP

- To prevent further degradation and ensuing wise use for the benefit of local communities and conservation of biodiversity.
- To provide financial assistance for conservation of priority wetlands and monitor implementation of programme.
- To prepare an inventory of the Indian wetlands.
- Since Land Resources belong to State, State Govt or UT are responsible for management of wetlands and implementation.

Wetlands International

1. It is a global organization that works to sustain and restore wetlands and their resources for people and biodiversity. It is an independent, not for profit organization supported by Govt and NGOs.
2. It does not fund. It was founded in 1937 as an International Wildfowl Enquiry. Not under UN.
3. Asian Waterbird Census (AWC) across Asia and Australia is coordinated by Wetlands International and Bombay Natural History Society (BNHS).

Source: HT
Recently, the Council of Scientific and Industrial Research’s Central Mechanical Engineering Research Institute (CSIR-CMERI) has developed a Municipal Solid Waste (MSW) Processing Facility (Decentralised Solid Waste Management Plant) to solve the problem of waste management in India.

**MSW Processing Facility:**

- It is developed following the Solid Waste Management (SWM) Rules 2016 prescribed by the Ministry of Environment, Forests and Climate Change.
- It has been developed with the potential to scientifically manage the solid waste including the Covid-19 wastes.
- The facility is equipped with special disinfection capabilities to help break the Covid-19
chain through UV-C lights and hot-air convection methods.

- The plant is self-sufficient in terms of energy requirement through the installation of roof-mounted solar panels, which can also feed the surplus energy supply onto a mini-grid.

**Objectives:**

- To unburden the common households from the segregation responsibilities through advanced segregation techniques.
- To achieve decentralised decimation of solid wastes.
- To help create value-added end-products from abundantly available redundant stuff such as dry leaves, dry grass, etc.

**Mechanism:**

The mechanised segregation system segregates solid waste into metallic waste (metal body, metal container, etc.), biodegradable waste (foods, vegetables, fruits, grass, etc.), non-biodegradable waste (plastics, packaging material, pouches, bottles etc.) and inert wastes (glass, stones etc.).

**Significance:**

- It opens up the opportunities to realise the dream of generating 100 GW Solar Power by 2022 and a city with a “Zero-Waste and Zero-Landfill Ecology”.
- It may become a source of job creation through both process-engagement and manufacturing, which can help support the Micro Small Enterprises (MSEs) and various start-ups across the nation.

**Challenges in Waste Management:**

- With an ever-increasing population and rapid pace of urbanisation, India faces a huge challenge of waste management.
- The volume of waste is projected to rise from the present 62 million tonnes to about 150 million tonnes by 2030.
- The ineffective processing of MSW also is the root cause of many diseases as the dumped landfills transform into contamination hubs for pathogens, bacteria and viruses.
- The most commonly used process "composting" also does not yield impactful economic returns for the entrepreneurs.
- Indiscriminate dumping of garbage at the current rate without appropriate scientific treatment would impose a huge requirement of landfill area per year.
- Studies suggest that the MSW generated in India mostly consists of a large fraction of organic wastes and their unscientific disposal produces greenhouse gas (GHG) emissions and other air pollutants like methane (CH4).
- It requires more land space and labour, pasteurisation for effective disinfection and has restricted utilisation due to presence of heavy metals.
- During the rainy season, managing it becomes difficult due to the presence of excessive moisture.
Various Waste Disposal Methods

Bio-degradable Waste Disposal:

- The bio-degradable component of the waste is decomposed in an anaerobic environment popularly known as bio-gasification.
- In this process, biogas is liberated through the conversion of organic matter and the biogas can be used as fuel for cooking or can also be utilised in a gas engine for the generation of electricity.
- The residual slurry from the biogas plant is converted to compost in a natural process known as vermicomposting by introducing earthworms. The vermicompost is utilised in organic farming.

Biomass Waste Disposal:

- Biomass waste such as dry leaves, dead branches, dry grass etc. are disposed of by first shredding it to suitable size followed by mixing with the slurry of the biogas digester.
- This mixture is the feedstock for briquette (compressed block of coal dust or other combustible material), which is utilised as fuel for cooking and in gasifier for production of syngas (or synthesis gas), utilised in a gas engine for electricity generation.
- Syngas is a fuel gas mixture consisting primarily of hydrogen, carbon monoxide, and very often some carbon dioxide.

Polymer Waste Disposal:

- The polymer waste consisting of plastics is being disposed of through pyrolysis, in which the polymer waste is heated to a temperature of 400-600°C in an anaerobic environment in presence of a suitable catalyst.
- The volatile matter from the polymer waste comes out as a result of heating which on condensation gives pyrolysis oil.
- The non-condensed syngas and crude pyrolysis oil after purification are reused for heating purposes and it helps in obtaining self-sustainability.
- The solid residue known as char is mixed with the biogas slurry for production of briquette.

Sanitary Waste Disposal:

- The sanitary items including masks, sanitary napkins, diapers etc. are disposed-off utilising high-temperature plasma gasification.
- The plasma gasification process uses electricity to generate high-temperature plasma arc (above 3000°C) inside the plasma reactor which converts the waste into syngas and the residual ash can be mixed with cement for preparation of recycled bricks.
- However, this technology is not economically viable as energy requirements for waste treatment using this technology is very high.
What is the issue?

- Recently, Facebook India’s policy head has appeared before the 30-member Joint Committee of Parliament which is examining the draft Personal Data Protection Bill, 2019.
- However, Amazon has declined to appear on the ground of risky travel amidst the pandemic.
- Amazon, Twitter, Facebook, Google and Paytm are among the companies from whom the committee has sought views on data security and protection amid concerns that the privacy of users is being “compromised” for commercial interest.
- Facebook was interrogated on how it targets audiences, their data storage model and transfer of data, etc.
- Amazon’s refusal amounts to a breach of parliamentary privilege and the panel is unanimous about taking coercive action if no one from the company appears on the next date.

Draft Protection Data Protection Bill, 2019

- Private Companies and State agencies has vast amount of data. There is no legal framework for data protection. Even the individuals dont know that their data is being used. Thus, there was a need for legislation which was also said by K S Puttaswamy case, 2018 that held Right to Privacy (Art 21) to be a Fundamental Right.
- Against this backdrop B N Srikrishna Committee (on Data Protection) prepared Personal Data
Protection Bill, 2018 to MEITY. It deals with the guidelines for collection, storage, and processing of personal data, consent of individuals, penalties & compensation and a code of conduct.

Terms

- Data is the large collection of info about Data Principal (individuals) stored in a computer.
- Data is collected and handled by Data Fiduciaries (like FB). Fiduciary controls how and why the data is processed.
- Data Processing is analysis of data to collect patterns, turn raw data into useful. This is done by a 3rd party Data Processor (like Cambridge Analytica).
- The physical attributes of data, where data is stored, where it is send and where it is turned into something useful are Data Flows. It determine who has the access to data, who profits off it, who taxes and who owns it.
- Data Localisation is the act of storing data on any device physically present within the borders of the country.

Provisions of the Bill

- It requires all Fiduciaries to store copy of all personal data in India.
- Bill trifurcates the data and mandates the storage in India depending on the type of data
  1. Personal Data: Identifies the individual like Name, address etc.
  2. Sensitive Personal Data:passwords, financial data, Health data, sex life, sexual orientation, biometric data, genetic data, transgender status, intersex status, caste or tribe, and Religious or political belief or affiliation. Such data can be processed only with explicit, informed, clear & specific consent of person. This is to be stored only in India. It can be processed abroad only in certain conditions including approval of Data Protection Agency (DPA).
  3. Critical Personal Data: Anything that Govt may deem critical. Like Military or National Security Data. Both stored and processed only in India.
- Bill removes the requirement of data mirroring (personal data). Individual consent is required for data transfer.
- Fiduciaries must provide Govt non personal data when demanded. It includes anonymised data like traffic patterns, demographic data.
- It requires Social media companies to develop their own user verification mechanism.
- Data Protection Authority of India (DPAI) to be set up (headed by a Chairperson and <= 6 whole time members) to monitor and enforce provisions of the Act.
- Adjudicating Officers in the DPA. Adjudicating decisions can be appealed in the appellate tribunal. Appeals from the tribunal will go to Supreme Court.
- Each Company will have a Data Protection Officer (DPO) for auditing, grievance redressal, maintenance etc.
- It proposes Purpose Limitation and Collection Limitation clause which limit the collection of data to what is needed for clear, specific and lawful purposes.
- It grants individuals right to data portability and ability to access and transfer one’s own data.
- It legislates on the Right to be Forgotten, right to restrict or prevent continuing disclosure of personal data. This has roots in EU law of GDPR (General Data Protection Regulation).
- Bill also states Penalties: Minor violations (5 crore or 2% of turnover) and Major (15 crore and 4% turnover).

Advantages
1. Data Localisation can help law Enforcement agencies. Much of cross border data transfer is
governed by individual bilateral mutual legal assistance treaties.
2. Instances of cyber attacks and surveillance will be checked. Recent Pegasus incident on
Whatsapp.
3. Fake news which leads to lynching, national security threats can be monitored now.
4. Ability to tax Internet giants.
5. It will help to enforce data sovereignty.

Disadvantages

1. The Bill focuses on consent of the person but it also gives powers to Government to dilute these
provisions for Govt agencies.
2. The powers given to Govt makes the gains from K S Puttaswamy case (Right to Privacy as a part of
life and liberty) meaningless.
3. Recent incidents of Israeli spyware Pegasus and Google alerting 500 Indian users regarding
"government backed" phishing attempts, the Indian government has still not provided answer.
4. Even the B N Srikrishna has used "Orwellian" and "Big brother" in response to removal of
safeguards for Govt agencies.
5. It said that the dangers to privacy is from state and non state actors both and hence the exemptions
should be "narrow" and for use in "limited circumstances".
6. DPAI is selected by a panel filled with Govt nominees disregards the fact that Govt agencies are
also regulated under the Act; they are major collector and processor of data themselves.
7. Even if data is stored in India, encryption keys may be out of the reach of national agencies. The
terms National Security are open ended.
8. FB, Google fear that this data localisation norms will have a domino effect in other countries.
9. It may backfire India's own startups attempting for global presence

Source: TH

International Monetary Fund (IMF)
GS-II | 26 October, 2020
• HQ is Washington DC. Head is Kristillina Georgiva.
• India is a founding member. 189 members.
• IMF is a cooperative institution.

Functions of IMF

1. Majorly for exchange rate stability, deciding exchange rate, distinctions between hard and soft currency, issuing paper gold and SDR mainly to tackle crisis.
2. Responsible for predicting World GDP, growth rate, both for developed and developing countries separately.
3. IMF works to control inequality and mainstream women.
4. **WB membership is important for IMF.**
5. Reports
   1. World Economic Outlook

Working areas
1. Surveillance and Finance and tech assistance to counter to meet out BoP crisis.
2. Even IMF provides economic assistance to members to promote trade and issue SDR.
3. Weightage in SDR: $ (42%) > Euro (31%) > Remnibi (10%) > Yuan (8%) > Pound (8%).
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Compound Interest Waiver on Moratorium Loans

What is Compound Interest Waiver Scheme?

- Under this, the government will grant eligible borrowers ex-gratia payment of the difference between the compound interest and simple interest for the six-month moratorium period.
- Ex-gratia payment is the money which is paid due to moral obligation and not due to legal obligation.
- Simple interest is levied only on the principal amount of a loan or deposit. In contrast, compound interest is levied on the principal amount and the interest that accumulates on it in every period.
### Eligibility

- The scheme shall be applicable for loans availed by Micro, Small and Medium Enterprises (MSMEs) as well as loans to retail customers for education, housing, consumer durables, automobiles, provided a borrower has an aggregate outstanding loan of Rs. 2 crore or less, from all such loans.
- Credit card dues have also been included in the scheme’s ambit.
- The loan interest waiver payment shall be admissible, irrespective of whether the borrower had availed the moratorium or not.
- However, this would only be permitted for loan accounts that had not been reported as Non-Performing Assets (NPAs) as on 29th February 2020.
- A loan is recorded as a non-performing asset or NPA, 90 days after repayments become overdue.

### What is the news?

**Festive respite**

Banks will credit compound interest levied on loans up to ₹2 crore between March 1 and August 31 back to borrowers by November 5.

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Recently, the Government of India has announced the scheme for the waiver of compound interest that was payable by the borrower who had opted for loan moratorium between 1st March 2020, and 31st August 2020.

The Reserve Bank of India (RBI) had in March 2020 offered a three-month moratorium on loans, enabling borrowers to defer repayments on EMIs and other loans. This was later extended by another three months, till 31st August 2020.

The loan moratorium, and waiver of compound interest, was aimed at providing borrowers relief amid the economic impact of the Covid-19 pandemic.

Impact:

- The amount saved through loan interest waiver will be very small. This is because only the interest that would have been charged on the interest of the original loan during the six months moratorium period is waived off.
- In other words, the loan repayment will continue and one will still need to pay the simple interest that would have paid if not opted for the loan moratorium.
- It is only the compounding interest that goes off.

Implementation:

- Lenders have been asked to set up a grievance redressal mechanism for eligible borrowers under the scheme by 30th October 2020.
- A mechanism has also been put in place for lenders to claim the amount back from the government. Lenders have to submit claims for reimbursement by 15th December 2020 through a special cell set up in the State Bank of India (SBI).

Source: TH
Central Vigilance Commission

- CVC is the apex vigilance institution, free of control from any executive 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.
- It is an independent body and is only responsible to the Parliament.
- It 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.

What is the news?

- Recently, the Central Vigilance Commission (CVC) has amended the Standard Operating Procedure (SOP) on adoption of “Integrity Pact” in government organisations for procurement activities.
The latest order revises the SOP issued in January 2017. The CVC also restricted the maximum tenure of Integrity External Monitors (IEMs) to three years in an organisation.

**Integrity Pact**

- Integrity Pact is a vigilance tool that envisages an agreement between the prospective vendors/bidders and the buyer, committing both the parties not to exercise any corrupt influence on any aspect of the contract.
- The pact also ensures transparency, equity and competitiveness in public procurement.

**Integrity External Monitors**

- The IEMs independently and objectively review the documents to determine if the parties have complied with their obligations under the pact.
- They may submit a report to the chief executive of the organisation concerned or directly to the Chief Vigilance Officer (CVO) and the CVC, if they find serious irregularities attracting the Prevention of Corruption Act, 1988 provisions.

**Features**

**Choice of IEM:**

**Earlier Provision**

- Under the 2017 order, the officials who had retired from positions of the level of Additional Secretary to the Central government and above, or equivalent pay scale, were eligible for the PSUs, board level officers in Schedule 'A' companies, PSBs, insurance companies and financial institutions.
- Officers of the Armed Forces who had retired from the rank equivalent to Lieutenant-General and above were considered for appointment.

**Amended Provision**

- It states that the choice of IEM should be restricted to officials from the government and Public Sector Undertakings (PSUs) who have retired from positions of the level of Secretary to the Central government or of equivalent pay scale.
- The officials who retired as Chairman and Managing Directors (CMDs) of PSUs — Schedule 'A' companies and CMD/Managing Director and Chief Executive Officer levels in the Public Sector Banks (PSBs), insurance companies and financial institutions — should be at least of the level of Additional Secretary or its equivalent.
- Officers of the Armed Forces who have retired from the rank equivalent of General may also be considered for appointment.
- Preference would be given to persons who have worked in any other sector, other than their own, or have worked as Chief Vigilance Officer (CVO) in any organization.

**Appointment as IEM:**
Earlier Provision: Under the 2017 order, the panel could include those already in the panel maintained by the CVC, or they could propose names of other suitable persons.

Amended Provision: It states that for appointment as IEM, the Ministry, department or organisation concerned has to forward a panel of suitable persons to the CVC, of those persons who are in the panel maintained by the CVC.

Tenure:

Earlier Provision: The 2017 order stated that the initial tenure of IEM would be three years which could be extended for another term of two years on a request received by the CVC from the organisation concerned.

Amended Provision: It states that the IEM will be appointed for a period of three years in an organisation.

Source: TH

2 New Ramsar Wetlands added: Now the total is 39
GS-III | 26 October, 2020
Ramsar Convention or Convention on Wetlands of International Importance

- It is an intergovernmental treaty for conservation and wise use of wetlands and their resources.
- It was adopted in 2 Feb, 1971 (Thus World Wetlands Day) in the Iranian city of Ramsar (Caspian Sea) and came into force in 1975. (WNBSR also in 1971)
- It is the only global environmental system treaty that deals with a particular ecosystem.
- Criteria for Wetlands of International Importance

1. If it has a unique, rare example of natural wetland type.
2. If it supports vulnerable, endangered or critically endangered species or threatened ecological communities.
3. If it supports plant or animal species important for maintaining biodiversity of a region.
4. If it regularly supports > 20000 waterbirds or 1% of individuals in 1 species or subspecies of waterbird.
5. If it supports a significant proportion of indigenous fish subspecies; if it is an importance
source of food for fishes, spawning ground, nursery and migration path.
6. It is an important source of food and water resource, increased possibilities for recreation and eco-tourism, improved scenic and educational values.

- Chillika lake was designated the first Ramsite in India in 1981. Sundarbans = largest Ramsar site.

Sundarbans declared as the Ramsar Wetland:

1. Sundarbans = 10000 sq km 60% in Bangladesh. It covers ~ 43% of Mangrove forests of India.
2. It is the largest tidal halophytic mangrove forest in the world.
3. It is located in delta region of Padma, Meghna and Brahmaputra river basins.
4. West Bengal has 2 Wetlands now = East Kolkata Wetlands & Sundarbans (which has now become the largest Ramsar Site in India).
5. The Sundarbans was made a UNESCO World Heritage Site in 1987.
6. They are the only mangrove habitat which supports a significant population of Royal Bengal Tigers, and they have unique aquatic hunting skills.
7. It is home to critically endangered northern river terrapin (Batuga, Basaka), the endangered Irrawaddy dolphin, and the endangered fishing cat. It also has Chital Deer, Crocodile & Snakes.
8. It met 4 out of 9 criteria of Ramsar: presence of rare species and threatened ecological communities, biological diversity, significant and representative fish and fish spawning ground and migration path.
9. The part of the Sundarban delta, which lies in Bangladesh, was accorded the status of a Ramsar site in 1992.

10 more wetland added to Ramsar wetland. Now there are 37 in total.

- Nandur Madhameshwar (1st in Maharashtra);
- Keshopura, Miani, Beas Conservation, Nangal in Punjab;
- Nawabganj, Parvati, Agra, Saman, Samaspur, Sandi, Sarsai Nawar in UP.
- UP has the maximum in number.
- Lakshadweep has the largest % of Wetlands followed by AN. Gujarat has the highest % Statewise.

2 more Ramsar sites added: Now the total Ramsar sites in India is 39

- Kabartal Wetland (Bihar) and Asan Conservation Reserve (Uttarakhand) have been designated as Ramsar sites, making them ‘Wetlands of International Importance’.

Kabartal Wetland:

- Also known as Kanwar Jheel, it covers 2,620 hectares of the Indo-Gangetic plains in the Begusarai district of Bihar.
- It acts as a vital flood buffer for the region besides providing livelihood opportunities to local communities.
Significant biodiversity is present, with 165 plant species and 394 animal species recorded, including 221 bird species. It is also a valuable site for fish biodiversity with over 50 species documented.

It is an important stopover along the Central Asian Flyway, with 58 migratory waterbirds using it to rest and refuel.

Five critically endangered species inhabit the site, including three vultures – the red-headed vulture (Sarcogyps calvus), white-rumped vulture (Gyps bengalensis) and Indian vulture (Gyps indicus) – and two waterbirds, the sociable lapwing (Vanellus gregarius) and Baer’s pochard (Aythya baeri).

Major threats to the Site include water management activities such as drainage, water abstraction, damming and canalization.

Asan Conservation Reserve:

- ACR is a 444-hectare stretch of the Asan River running down to its confluence with the Yamuna River in Dehradun district of Uttarakhand. It is Uttarakhand’s first Ramsar Site.
- The damming of the River by the Asan Barrage in 1967 resulted in siltation above the dam wall, which helped to create some of the Site’s bird-friendly habitats.
- These habitats support 330 species of birds including the critically endangered red-headed vulture (Sarcogyps calvus), white-rumped vulture (Gyps bengalensis) and Baer’s pochard (Aythya baeri).
- Other non-avian species present include 49 fish species, one of these being the endangered Putitora mahseer (Tor putitora). Fish use the site for feeding, migration and spawning.

Montreux Record

1. It is a register of wetlands maintained as a part of Ramsar Sites where changes in the ecological character have occurred or are occurring as a result of technological developments, pollution or human influence.
2. 2 Sites from India included in this are Keoladeo National Park, Rajasthan and Loktak Lake, Manipur.

National Wetland Inventory and Assessment:

- The 1st scientific national inventory of wetlands in India was carried out by Space Applications Center (ISRO), Ahmedabad at the behest of MoEF.
- Lakshadweep has the largest % of Wetlands (96.12%) followed by A&N. Gujarat has the highest % (statewise).

National Wetland Conservation Programme (NWCP), 1985-86

- Under this programme, 115 wetlands have been identified which needs urgent conservation.
Objective of NWCP

- To prevent further degradation and ensuing wise use for the benefit of local communities and conservation of biodiversity.
- To provide financial assistance for conservation of priority wetlands and monitor implementation of programme.
- To prepare an inventory of the Indian wetlands.
- Since Land Resources belong to State, State Govt or UT are responsible for management of wetlands and implementation

Wetlands International

1. It is a global organization that works to sustain and restore wetlands and their resources for people and biodiversity. It is an independent, not for profit organization supported by Govt and NGOs.
2. It does not fund. It was founded in 1937 as an International Wildfowl Enquiry. Not under UN.
3. Asian Waterbird Census (AWC) across Asia and Australia is coordinated by Wetlands International and Bombay Natural History Society (BNHS).

Source: HT

CSIR-CMERIâ€™s Municipal Solid Waste Processing Facility

CSIR-CMERI’s Municipal Solid Waste Processing Facility
Recently, the Council of Scientific and Industrial Research’s Central Mechanical Engineering Research Institute (CSIR-CMERI) has developed a Municipal Solid Waste (MSW) Processing Facility (Decentralised Solid Waste Management Plant) to solve the problem of waste management in India.

**MSW Processing Facility:**

- It is developed following the Solid Waste Management (SWM) Rules 2016 prescribed by the Ministry of Environment, Forests and Climate Change.
- It has been developed with the potential to scientifically manage the solid waste including the Covid-19 wastes.
- The facility is equipped with special disinfection capabilities to help break the Covid-19
chain through UV-C lights and hot-air convection methods.

- The plant is self-sufficient in terms of energy requirement through the installation of roof-mounted solar panels, which can also feed the surplus energy supply onto a mini-grid.

Objectives:

- To unburden the common households from the segregation responsibilities through advanced segregation techniques.
- To achieve decentralised decimation of solid wastes.
- To help create value-added end-products from abundantly available redundant stuff such as dry leaves, dry grass, etc.

Mechanism:

The mechanised segregation system segregates solid waste into metallic waste (metal body, metal container, etc.), biodegradable waste (foods, vegetables, fruits, grass, etc.), non-biodegradable waste (plastics, packaging material, pouches, bottles etc.) and inert wastes (glass, stones etc.).

Significance:

- It opens up the opportunities to realise the dream of generating 100 GW Solar Power by 2022 and a city with a “Zero-Waste and Zero-Landfill Ecology”.
- It may become a source of job creation through both process-engagement and manufacturing, which can help support the Micro Small Enterprises (MSEs) and various start-ups across the nation.

Challenges in Waste Management:

- With an ever-increasing population and rapid pace of urbanisation, India faces a huge challenge of waste management.
- The volume of waste is projected to rise from the present 62 million tonnes to about 150 million tonnes by 2030.
- The ineffective processing of MSW also is the root cause of many diseases as the dumped landfills transform into contamination hubs for pathogens, bacteria and viruses.
- The most commonly used process "composting" also does not yield impactful economic returns for the entrepreneurs.
- Indiscriminate dumping of garbage at the current rate without appropriate scientific treatment would impose a huge requirement of landfill area per year.
- Studies suggest that the MSW generated in India mostly consists of a large fraction of organic wastes and their unscientific disposal produces greenhouse gas (GHG) emissions and other air pollutants like methane (CH4).
- It requires more land space and labour, pasteurisation for effective disinfection and has restricted utilisation due to presence of heavy metals.
- During the rainy season, managing it becomes difficult due to the presence of excessive moisture.
Various Waste Disposal Methods

Bio-degradable Waste Disposal:

- The bio-degradable component of the waste is decomposed in an anaerobic environment popularly known as bio-gasification.
- In this process, biogas is liberated through the conversion of organic matter and the biogas can be used as fuel for cooking or can also be utilised in a gas engine for the generation of electricity.
- The residual slurry from the biogas plant is converted to compost in a natural process known as vermicomposting by introducing earthworms. The vermicompost is utilised in organic farming.

Biomass Waste Disposal:

- Biomass waste such as dry leaves, dead branches, dry grass etc. are disposed of by first shredding it to suitable size followed by mixing with the slurry of the biogas digester.
- This mixture is the feedstock for briquette (compressed block of coal dust or other combustible material), which is utilised as fuel for cooking and in gasifier for production of syngas (or synthesis gas), utilised in a gas engine for electricity generation.
- Syngas is a fuel gas mixture consisting primarily of hydrogen, carbon monoxide, and very often some carbon dioxide.

Polymer Waste Disposal:

- The polymer waste consisting of plastics is being disposed of through pyrolysis, in which the polymer waste is heated to a temperature of 400-600°C in an anaerobic environment in presence of a suitable catalyst.
- The volatile matter from the polymer waste comes out as a result of heating which on condensation gives pyrolysis oil.
- The non-condensed syngas and crude pyrolysis oil after purification are reused for heating purposes and it helps in obtaining self-sustainability.
- The solid residue known as char is mixed with the biogas slurry for production of briquette.

Sanitary Waste Disposal:

- The sanitary items including masks, sanitary napkins, diapers etc. are disposed-off utilising high-temperature plasma gasification.
- The plasma gasification process uses electricity to generate high-temperature plasma arc (above 3000°C) inside the plasma reactor which converts the waste into syngas and the residual ash can be mixed with cement for preparation of recycled bricks.
- However, this technology is not economically viable as energy requirements for waste treatment using this technology is very high.
ESI Scheme extended to Arunachal Pradesh

The ESI Scheme stands implemented in 568 districts in all the States and Union Territories, except Lakshadweep. Recently, the central government has extended the Employees' State Insurance (ESI) Scheme to Arunachal Pradesh, with effect from 1st November, 2020.

**Employees' State Insurance (ESI) Scheme** provides social protection to workers and their dependants, in the organised sector, in contingencies, such as, sickness, maternity and death or disablement due to an employment injury or occupational hazard.

**Provisions:**

- The ESI Act, 1948 is applicable to factories and notified establishments in an implemented area employing 10 or more employees for wages.
- The "appropriate Government" State or Central is empowered to extend the provisions of the ESI Act to various classes of establishments, industrial, commercial or agricultural or otherwise.
- Most of the State Governments have extended the ESI Act to certain specific class of establishments, such as, shops, hotels, restaurants, cinemas, preview theatres, motors transport undertakings and newspaper establishments etc., employing 10 or more persons.
- However, the threshold for Coverage of establishments is still 20 Employees in Maharashtra.
- **Eligibility for Employees:** The existing wage limit for coverage under the Act is Rs. 21,000 per month (Rs. 25,000 per month in the case of persons with disability).
- **Self-Financing Scheme:** The ESI Scheme is financed by contributions from employers and employees.
- In June 2020, the government had reduced the rate of contribution under the ESI Act from 6.5% to 4% (employers' contribution reduced from 4.75% to 3.25% and employees' contribution reduced from 1.75% to 0.75%).
- Employees, earning less than Rs. 137 a day as daily wages, are exempted from payment of their share of contribution.
- **Benefits:** The covered employees and their dependants are eligible for a host of benefits including Cashless Medical Care Services, Sickness Benefit, Maternity Benefit, Employment Injury Benefit and Dependant Benefit in case of death due to employment injury, Unemployment Benefit etc.
- The employees covered under ESI Scheme are also entitled to unemployment allowance. There are two unemployment allowance schemes namely Atal Beemit Vyakti Kalyan Yojna (ABVKY) and Rajiv Gandhi Shramik Kalyan Yojna (RGSKY).
- **Administration:** It is administered by an apex corporate body called the Employees' State Insurance Corporation (ESIC). The Corporation is headed by the Union Minister of Labour, as its Chairman.
Recently, the PLACID Trial, a multicentre randomized controlled trial, has shown that the use of convalescent plasma (CP) as a therapeutic for Covid-19 patients showed no positive effects and did not improve the outcome of the patients.

The randomised controlled trial (RCT) is a trial in which subjects are randomly assigned to one of two groups: one (the experimental group) receiving the intervention that is being tested, and the other (the comparison group or control) receiving an alternative (conventional) treatment.

Convalescent Plasma Therapy:

- Convalescent Plasma, extracted from the blood of patients recovering from an infection, is a source of antibodies against the infection.
- The therapy uses blood from people who have recovered from an illness to help others recover.
- Blood donated by people who have recovered from Covid-19 has antibodies to the virus that causes it. The donated blood is processed to remove blood cells, leaving behind liquid (plasma) and antibodies. These can be given to people with Covid-19 to boost their ability to fight the virus.
- The plasma donor would have to be a documented case of Covid-19 and healthy for 28 days since the last symptoms.

PLACID Trial:

- It was conducted by the Indian Council of Medical Research (ICMR) and its aim was to investigate CPT’s effectiveness for the treatment of Covid-19.
- It is the first and largest randomised control trial to be completed in the world.
- The trial results indicate that there was no difference in the 28-day mortality (estimates of deaths in the 28 days after entering the hospital for a specific condition) or progression of Covid-19 from moderate to severe in patients treated with CP along with basic standard care compared to basic standard care alone.
- While the use of CP seemed to improve the resolution of shortness of breath and fatigue...
in patients with moderate Covid-19, this did not translate into a reduction in 28-day mortality or progression to severe disease.

Impact of the Findings:

- The ICMR is now considering removing the option of CPT from the national guidelines.
- CPT as a treatment for Covid-19 in India has led to questionable practices such as calls for donors on social media, and the sale of convalescent plasma on the black market.
- Although CP is a safe form of treatment when transfused in accordance with the regulations, it involves resource-intensive processes such as plasmapheresis (separating plasma from the blood cells), plasma storage, and measurement of neutralising antibodies and a limited number of institutes have the capacity to undertake these procedures in a quality-assured manner.
- However, experts have held that guidelines are not necessarily binding and it is too early to dismiss convalescent plasma therapy.

Source: IE
Regional countries that recognize Israel (year of recognition)

Regional countries that don’t recognize Israel

Regional countries “warming” to Israel

Note: Israel has diplomatic relations with more than 160 countries.

Sources: Israel Ministry of Foreign Affairs, WSJ and news reports
Historical Background

- Sudan, which was technically at war with Israel since its foundation in 1948, has now become the third country to forge diplomatic relations with it, in recent times.
- Recently, in a deal brokered by the USA, Sudan and Israel have agreed to normalise relations to end decades of hostility.
- Earlier, the USA brokered diplomatic pacts between Israel and the UAE and Bahrain as well, to normalise their relations.

Implications:

USA

- Sudan was added to the USA Black list in 1993 after it was accused of harbouring groups such as Hezbollah and Palestinian militant outfits which the USA deems as terrorists.
- As a result, Sudan was cut off from the global economy and was starved of foreign investment which faced another blow in 2011 when South Sudan was formed taking away its major oil resources.
- The deal follows USA’s conditional agreement to remove Sudan from its blacklist of countries accused of sponsoring terrorism.
- This deal would deepen Sudan’s engagement with the West.
- With its name removed from the list, Sudan will no longer stay deprived of foreign investments.
- Under the deal, Sudan has agreed to pay USD 335 million in compensation to victims of the Al-Qaeda bombings of USA embassies in Kenya and Tanzania in 1998.

Israel

- After the six-day war of 1967 war, Arab powers met in Khartoum (Sudan’s capital) to pledge three “noes” viz. no peace with Israel, no recognition of Israel, and no negotiations with Israel. Therefore, the deal holds a symbolic significance for Israel.
- It boosts Israel’s motive which has made it a priority to forge ties with formerly hostile countries in Africa and the Arab world in the absence of any progress with the Palestinians.
- Unlike the UAE and Bahrain, which have never fought with Israel, Sudan sent forces to fight in the war around Israel’s creation in 1948 and during the war of 1967. In the 1970s, Israel backed Sudanese insurgents fighting the Khartoum government.
- With this agreement, Israel will complete the creation of a safety cordon in the Red Sea, which currently includes Egypt, Jordan, South Sudan and Saudi Arabia.
- The deal is also aimed at unifying Arab countries against their common adversary, Iran.
- Though Sudan has been largely marginal to Middle Eastern politics in recent decades, the normalisation has significant symbolic value.

Source: TH
Tsunamis

- **Definition**: Tsunamis are a series of waves usually generated by movement of the sea floor. These movements are caused by different types of geophysical phenomena such as earthquakes, landslides and volcanic eruptions.
- The word tsunami is a **Japanese word**, represented by two characters: tsu, meaning, "harbor", and nami meaning, "wave".
- They frequently occur in the Pacific, where dense oceanic plates slide under the lighter continental plates. When these plates fracture they provide a vertical movement of the seafloor that allows a quick and efficient transfer of energy from the solid earth to the ocean.
What is the news?

According to experts from the Indian National Centre for Ocean Information System (INCOIS), India is much safer against tsunami threats than it was in 2004, due to the establishment of a state-of-the-art tsunami early warning system at INCOIS.

INCOIS

- INCOIS was established in 1999 as an autonomous body under the Ministry of Earth Sciences.
- INCOIS through Indian Tsunami Early Warning Centre (ITEWC) is the nodal agency to provide tsunami advisories to India.
- It is coordinating with the Disaster Management Officials (DMOs) for implementation of Tsunami Ready programme in India.
- It conducts IOWave Tsunami mock exercises biannually to strengthen the readiness to handle the emergency situations with stakeholders.
- INCOIS also identifies the Potential Fishing Zones (PFZ) for the fishermen community.
- It has also made improvement in overcoming the cloud cover through usage of geostationary satellites and numerical modelling.
- INCOIS has also partnered with Indian Space Research Organisation (ISRO) and Airports Authority of India (AAI) to develop a satellite based message broadcasting services through the indigenous navigational satellite communication system ‘NAVIC’.

Indian Tsunami Early Warning System

- The Indian Tsunami Early Warning System (ITEWS) was established in 2007 and is based...
It is an integrated effort of different organizations including the Department of Space (DOS), Department of Science and Technology (DST), the Council of Scientific and Industrial Research (CSIR), Survey of India (SOI) and National Institute of Ocean Technology (NIOT).

ITEWS comprises a real-time network of seismic stations, tide gauges and a 24X7 operational tsunami warning centre to detect tsunamigenic earthquakes, to monitor tsunamis and to provide timely advisories to vulnerable communities.

Indian scientists can detect large undersea earthquakes in Indian Ocean in real-time and provide a tsunami warning in 10-20 minutes after the earthquake occurs.

In 2004, India didn’t have any tsunami warning capability nor any public knowledge of tsunamis in the Indian Ocean.

India is among the first few centres to introduce quantitative tsunami forecasts.

Intergovernmental Oceanographic Commission (IOC) of UNESCO (also known as UNESCO-IOC) accredited Indian Tsunami Early Warning Centre (ITEWC) as Tsunami Service Provider (TSP) for 28 Indian Ocean Rim (IOR) countries, along with Indonesia and Australia in 2011, for issuing regional warnings.

Recent Focus in Tsunami Warning Capability:

- The focus in recent times has been on enhancing community awareness and response through several capacity building activities, biennial Indian Ocean wide tsunami drills and piloting of the UNESCO-IOC Tsunami Ready initiative.
- **Tsunami Ready** is a community performance-based programme to promote tsunami preparedness through active collaboration of public, community leaders, and national and local emergency management agencies.
- The main objective of this programme is to improve coastal community's preparedness for tsunami emergencies, to minimize the loss of life and property and to ensure a structural and systematic approach in building community preparedness through fulfilling the best-practice indicators.
- Two villages of Odisha- Venkatraipur in Ganjam district and Noliasahi in Jagatsinghpur district are now ‘Tsunami Ready’.
- INCOIS is establishing a network of 35 stations to estimate the tectonic plate’s movements in real-time and measure the vertical displacements under the sea directly.

Source: TH

Model Code of Conduct: MP CM remark on a woman Case Study

GS-II | 27 October, 2020
Recently, the Election Commission (EC) has found former Madhya Pradesh Chief Minister’s remark on a woman politician violative of the Model Code of Conduct (MCC).

What is a Model Code of Conduct?

- The MCC is a set of guidelines issued by the EC to regulate political parties and candidates prior to elections.
- It helps EC in keeping with the mandate it has been given under Article 324 of the Constitution, which gives it the power to supervise and conduct free and fair elections to the Parliament and State Legislatures.
- The MCC is operational from the date on which the election schedule is announced until the date of result announcement.
- The MCC does not have any statutory backing but is strictly enforced by the Election Commission.
- Certain provisions of the MCC are enforced through invoking provisions in other statutes like Indian Penal Code, 1860; Code of Criminal Procedure 1973 and RPA, 1951.

Historical Background

- The origins of the MCC lie in the Assembly elections of Kerala in 1960, when the State administration prepared a ‘Code of Conduct’ for political actors.
- Subsequently, in the Lok Sabha elections in 1962, the ECI circulated the code to all recognised political parties and State governments and it was wholeheartedly followed.
It was in 1991 after repeated flouting of the election norms and continued corruption, the EC decided to enforce the MCC more strictly.

Components of Model Code of Conduct

- **General Conduct**: Criticism of political parties must be limited to their policies and programmes, past record and work. Activities such as using caste and communal feelings to secure votes, criticising candidates on the basis of unverified reports, bribing or intimidation of voters, etc. are prohibited.
- **Processions**: If two or more candidates plan processions along the same route, organisers must establish a contact in advance to ensure that the processions do not clash. Carrying and burning effigies representing members of other political parties is not allowed.
- **Polling Day**: All authorised party workers at polling booths should be given suitable badges or identity cards. Identity slips supplied by them to voters shall be on plain (white) paper and shall not contain any symbol, name of the candidate or the name of the party.
- **Polling Booths**: Only voters, and those with a valid pass from the EC are allowed to enter polling booths.
- **Meetings**: Parties must inform the local police authorities of the venue and time of any meeting in time to enable the police to make adequate security arrangements.
- **Observers**: The EC will appoint observers to whom any candidates may report problems regarding the conduct of the election.
- **Party in power**: The MCC incorporated certain restrictions in 1979, regulating the conduct of the party in power.

1. Ministers must not combine official visits with election work or use official machinery for the same.
2. The party must avoid advertising at the cost of the public exchequer or using official mass media for publicity on achievements to improve chances of victory in the elections.
3. Ministers and other authorities must not announce any financial grants, or promise any construction of roads, provision of drinking water, etc.
4. Other parties must be allowed to use public spaces and rest houses and these must not be monopolised by the party in power.

- **Election manifestos**: Added in 2013, these guidelines prohibit parties from making promises that exert an undue influence on voters, and suggest that manifestos also indicate the means to achieve promises.

**Should MCC be legally binding?**

- In 2013, the Standing Committee on Personnel, Public Grievances, Law and Justice, recommended making the MCC legally binding and recommended that the MCC be made a part of the RPA 1951.
- However, the EC argues against making it legally binding.
- According to it, elections must be completed within a relatively short time or close to 45 days and judicial proceedings typically take longer, therefore it is not feasible to make it
The High Court allowed the open court proceedings through the video conferencing, except the proceedings to be conducted in camera.

In camera means in private chambers of a judge, with the press and public excluded.

It observed that the initiative of live telecast is on an experimental basis and the aspect of continuing with or adapting the modality of live court proceedings will be decided based on the outcome of this trial.

The Supreme Court in Swapnil Tripathi v Supreme Court of India (2018) has ruled in
favour of opening up the apex court through live-streaming.

- It held that the live streaming proceedings is part of the right to access justice under Article 21 of the Constitution.
- However, the judgment has remained unimplemented.
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- The move has been welcomed by lawyers, law students and the public at large besides litigants, being seen as a major measure towards transparency in judicial proceedings.
- Also, in the model video conferencing rules as prescribed by the e-Committee of the Supreme Court, it has been provided that the public will be allowed to view the hearing conducted through video conferencing.

Benefits of Live Streaming

- A live stream would help litigants follow the proceedings in their case and also assess their lawyers’ performance. People from far-flung States such as Tamil Nadu and Kerala do not have to travel all the way to the national capital for a day’s hearing.
- It would keep a check on lawyers’ conduct inside the courtrooms. With the entire country watching them, there would be fewer interruptions, raised voices and adjournments from the lawyers.
- Live-streaming will bring transparency and access to justice.

Issues Involved

- The live streaming of the Courts are susceptible to abuses.
- It can involve national security concerns and can amount to a violation of the fundamental right to privacy in matrimonial disputes and rape cases.
- The unauthorised reproduction of the live streaming videos is another cause for concern as its regulation will be very difficult at the government’s end.
- Concerns have also been raised about the commercial aspect of the whole issue. The agreements with broadcasters should be on a non-commercial basis. No one should profit from the arrangement.
- Infrastructure, specially internet connectivity is also the biggest challenge in implementing the live proceedings of Courts.

Source: TH
What is in the News?

- Recently, in a letter to the Chief Justice of India (CJI), Andhra Pradesh Chief Minister has accused the Supreme Court judge, Justice N.V. Ramana and some judges of Andhra Pradesh (AP) High Court of misconduct, corruption and political bias.
- The allegation against the judges is unprecedented since it has been made publicly.

What are the Issues Involved?

- The Constitution of India protects the independence of judges of the High Courts and the Supreme Court by making them removable only through a process of impeachment. Article 121 and 211 expressly bars the Parliament and State Legislatures from discussing the misconduct of judges.
- Article 121 states that no discussions shall take place in Parliament with respect to the conduct of any judge of the Supreme Court or of a High Court in the discharge of his duties except upon a motion for the removal of the judge.
- Article 211 says that no discussion shall take place in the legislature of a state with respect to the conduct of any judge of the Supreme Court or of a High Court in the discharge of his duties.
- However, the AP CM has not made the allegations against the judges in the legislative assembly, and therefore, the bar under Article 211 is not attracted.
The chief minister of a state can make such allegations by circumventing the bar under Article 211, as the constitution does not envisage such a possibility. However, generally such allegations against judges are not made publicly, since it may cast aspersion on the credibility of the judiciary. Since, AP CM has made the allegations publicly, such an act may invite action for contempt of court.

Action in Cases of Misconduct of Judges:

- A judge can be removed from office on grounds of ‘proved misbehaviour or incapacity’.
- However, not all forms of misbehaviour will warrant removal. There could be other kinds of impropriety too.
- There are times when serious complaints of misconduct are made and CJI is called upon to examine them. Since 1997, judges have adopted an ‘in-house procedure’ for inquiring into such charges.

What is the In-House Procedure:

- Under the in-house procedure, when a complaint is received against a High Court judge, the CJI should decide if the issue is frivolous or serious.
- If a deeper probe is considered necessary, both the complaint and the judge’s response, along with the High Court’s Chief Justice’s comments, are recorded for further action.
- If deemed necessary, CJI can also form a three-member committee to hold an inquiry into the matter.
- The committee should have two Chief Justices from other High Courts and one High Court judge.
- The inquiry it holds is of the nature of a fact-finding mission and is not a formal judicial inquiry involving examination of witnesses. The judge concerned is entitled to appear before it.
- If the committee finds substance in the charges, it can give two kinds of recommendations. One, that the misconduct is serious enough to require removal from office, or that it is not serious enough to warrant removal.
- If the misconduct involves removal of a judge, the judge concerned will be urged to resign or seek voluntary retirement.
- If the judge is unwilling to quit, the Chief Justice of the High Court concerned would be asked to withdraw judicial work from him.
- The President and the Prime Minister will be informed of the situation, clearing the way for Parliament to begin the process of removal.
- If the misconduct does not warrant removal, the judge would be advised accordingly.

Procedure in Case of Chief Justice of High Court/ Judge of Supreme Court:

- If the case is against a High Court’s Chief Justice, the same procedure is followed as that of a judge of the High Court, but the probe committee comprises a Supreme Court judge and two Chief Justices.
- If a Supreme Court judge faces such a charge, the in-house panel will comprise three Supreme Court judges.
- Also, the in-house procedure does not give any separate provision to deal with complaints
Way Forward

- Separation of powers between legislative, executive and judiciary has been regarded as a basic feature of our constitution in Kesavananda Bharati v State of Kerala, 1973.
- The constitution does not envisage supremacy of any of the three organs of the state. But the functioning of all the three organs is controlled by the constitution.
- Wherever interaction and deliberations among the three organs have been envisaged, a delicate balance and mutual respect are contemplated.

Source: TH
ESI Scheme extended to Arunachal Pradesh

The ESI Scheme stands implemented in 568 districts in all the States and Union Territories, except Lakshadweep. Recently, the central government has extended the Employees' State Insurance (ESI) Scheme to Arunachal Pradesh, with effect from 1st November, 2020.

**Employees' State Insurance (ESI) Scheme** provides social protection to workers and their dependants, in the organised sector, in contingencies, such as, sickness, maternity and death or disablement due to an employment injury or occupational hazard.

**Provisions:**

- The ESI Act, 1948 is applicable to factories and notified establishments in an implemented area employing 10 or more employees for wages.
- The "appropriate Government" State or Central is empowered to extend the provisions of the ESI Act to various classes of establishments, industrial, commercial or agricultural or otherwise.
- Most of the State Governments have extended the ESI Act to certain specific class of establishments, such as, shops, hotels, restaurants, cinemas, preview theatres, motors transport undertakings and newspaper establishments etc., employing 10 or more persons.
- However, the threshold for Coverage of establishments is still 20 Employees in Maharashtra.
- **Eligibility for Employees:** The existing wage limit for coverage under the Act is Rs. 21,000 per month (Rs. 25,000 per month in the case of persons with disability).
- **Self-Financing Scheme:** The ESI Scheme is financed by contributions from employers and employees.
- In June 2020, the government had reduced the rate of contribution under the ESI Act from 6.5% to 4% (employers' contribution reduced from 4.75% to 3.25% and employees' contribution reduced from 1.75% to 0.75%).
- Employees, earning less than Rs. 137 a day as daily wages, are exempted from payment of their share of contribution.
- **Benefits:** The covered employees and their dependants are eligible for a host of benefits including Cashless Medical Care Services, Sickness Benefit, Maternity Benefit, Employment Injury Benefit and Dependant Benefit in case of death due to employment injury, Unemployment Benefit etc.
- The employees covered under ESI Scheme are also entitled to unemployment allowance. There are two unemployment allowance schemes namely Atal BeemitVyakti Kalyan Yojna (ABVKY) and Rajiv Gandhi Shramik Kalyan Yojna (RGSKY).
- **Administration:** It is administered by an apex corporate body called the Employees' State Insurance Corporation (ESIC). The Corporation is headed by the Union Minister of Labour, as its Chairman.
Recently, the PLACID Trial, a multicentre randomized controlled trial, has shown that the use of convalescent plasma (CP) as a therapeutic for Covid-19 patients showed no positive effects and did not improve the outcome of the patients.

The randomised controlled trial (RCT) is a trial in which subjects are randomly assigned to one of two groups: one (the experimental group) receiving the intervention that is being tested, and the other (the comparison group or control) receiving an alternative (conventional) treatment.

Convalescent Plasma Therapy:
- Convalescent Plasma, extracted from the blood of patients recovering from an infection, is a source of antibodies against the infection.
- The therapy uses blood from people who have recovered from an illness to help others recover.
- Blood donated by people who have recovered from Covid-19 has antibodies to the virus that causes it. The donated blood is processed to remove blood cells, leaving behind liquid (plasma) and antibodies. These can be given to people with Covid-19 to boost their ability to fight the virus.
- The plasma donor would have to be a documented case of Covid-19 and healthy for 28 days since the last symptoms.

PLACID Trial:
- It was conducted by the Indian Council of Medical Research (ICMR) and its aim was to investigate CPT’s effectiveness for the treatment of Covid-19.
- It is the first and largest randomised control trial to be completed in the world.
- The trial results indicate that there was no difference in the 28-day mortality (estimates of deaths in the 28 days after entering the hospital for a specific condition) or progression of Covid-19 from moderate to severe in patients treated with CP along with basic standard care compared to basic standard care alone.
- While the use of CP seemed to improve the resolution of shortness of breath and fatigue
in patients with moderate Covid-19, this did not translate into a reduction in 28-day mortality or progression to severe disease.

Impact of the Findings:

- The ICMR is now considering removing the option of CPT from the national guidelines.
- CPT as a treatment for Covid-19 in India has led to questionable practices such as calls for donors on social media, and the sale of convalescent plasma on the black market.
- Although CP is a safe form of treatment when transfused in accordance with the regulations, it involves resource-intensive processes such as plasmapheresis (separating plasma from the blood cells), plasma storage, and measurement of neutralising antibodies and a limited number of institutes have the capacity to undertake these procedures in a quality-assured manner.
- However, experts have held that guidelines are not necessarily binding and it is too early to dismiss convalescent plasma therapy.

Source: IE
Regional countries that recognize Israel (year of recognition)

Regional countries that **don’t** recognize Israel

Regional countries “warming” to Israel

Note: Israel has diplomatic relations with more than 160 countries.

Sources: Israel Ministry of Foreign Affairs, WSJ and news reports
Historical Background

- Sudan, which was technically at war with Israel since its foundation in 1948, has now become the third country to forge diplomatic relations with it, in recent times.
- Recently, in a deal brokered by the USA, Sudan and Israel have agreed to normalise relations to end decades of hostility.
- Earlier, the USA brokered diplomatic pacts between Israel and the UAE and Bahrain as well, to normalise their relations.

Implications:

USA

- Sudan was added to the USA Black list in 1993 after it was accused of harbouring groups such as Hezbollah and Palestinian militant outfits which the USA deems as terrorists.
- As a result, Sudan was cut off from the global economy and was starved of foreign investment which faced another blow in 2011 when South Sudan was formed taking away its major oil resources.
- The deal follows USA’s conditional agreement to remove Sudan from its blacklist of countries accused of sponsoring terrorism.
- This deal would deepen Sudan’s engagement with the West.
- With its name removed from the list, Sudan will no longer stay deprived of foreign investments.
- Under the deal, Sudan has agreed to pay USD 335 million in compensation to victims of the Al-Qaeda bombings of USA embassies in Kenya and Tanzania in 1998.

Israel

- After the six-day war of 1967 war, Arab powers met in Khartoum (Sudan’s capital) to pledge three “noes” viz. no peace with Israel, no recognition of Israel, and no negotiations with Israel. Therefore, the deal holds a symbolic significance for Israel.
- It boosts Israel’s motive which has made it a priority to forge ties with formerly hostile countries in Africa and the Arab world in the absence of any progress with the Palestinians.
- Unlike the UAE and Bahrain, which have never fought with Israel, Sudan sent forces to fight in the war around Israel’s creation in 1948 and during the war of 1967. In the 1970s, Israel backed Sudanese insurgents fighting the Khartoum government.
- With this agreement, Israel will complete the creation of a safety cordon in the Red Sea, which currently includes Egypt, Jordan, South Sudan and Saudi Arabia.
- The deal is also aimed at unifying Arab countries against their common adversary, Iran.
- Though Sudan has been largely marginal to Middle Eastern politics in recent decades, the normalisation has significant symbolic value.

Source: TH
India much safer against Tsunami threat: INCOIS

Tsunamis

- **Definition**: Tsunamis are a series of waves usually generated by movement of the seafloor. These movements are caused by different types of geophysical phenomena such as earthquakes, landslides and volcanic eruptions.
- The word tsunami is a **Japanese word**, represented by two characters: tsu, meaning, "harbor", and nami meaning, "wave".
- They frequently occur in the Pacific, where dense oceanic plates slide under the lighter continental plates. When these plates fracture they provide a vertical movement of the seafloor that allows a quick and efficient transfer of energy from the solid earth to the ocean.
What is the news?

According to experts from the Indian National Centre for Ocean Information System (INCOIS), India is much safer against tsunami threats than it was in 2004, due to the establishment of a state-of-the-art tsunami early warning system at INCOIS.

INCOIS

- INCOIS was established in 1999 as an autonomous body under the Ministry of Earth Sciences.
- INCOIS through Indian Tsunami Early Warning Centre (ITEWC) is the nodal agency to provide tsunami advisories to India.
- It is coordinating with the Disaster Management Officials (DMOs) for implementation of Tsunami Ready programme in India.
- It conducts IOWave Tsunami mock exercises biannually to strengthen the readiness to handle the emergency situations with stakeholders.
- INCOIS also identifies the Potential Fishing Zones (PFZ) for the fishermen community.
- It has also made improvement in overcoming the cloud cover through usage of geostationary satellites and numerical modelling.
- INCOIS has also partnered with Indian Space Research Organisation (ISRO) and Airports Authority of India (AAI) to develop a satellite based message broadcasting services through the indigenous navigational satellite communication system ‘NAVIC’.

Indian Tsunami Early Warning System

- The Indian Tsunami Early Warning System (ITEWS) was established in 2007 and is based
at & operated by INCOIS, Hyderabad.

- It is an integrated effort of different organizations including the Department of Space (DOS), Department of Science and Technology (DST), the Council of Scientific and Industrial Research (CSIR), Survey of India (SOI) and National Institute of Ocean Technology (NIOT).
- ITEWS comprises a real-time network of seismic stations, tide gauges and a 24X7 operational tsunami warning centre to detect tsunamigenic earthquakes, to monitor tsunamis and to provide timely advisories to vulnerable communities.
- Indian scientists can detect large undersea earthquakes in Indian Ocean in real-time and provide a tsunami warning in 10-20 minutes after the earthquake occurs.
- In 2004, India didn’t have any tsunami warning capability nor any public knowledge of tsunamis in the Indian Ocean.
- India is among the first few centres to introduce quantitative tsunami forecasts.
- Intergovernmental Oceanographic Commission (IOC) of UNESCO (also known as UNESCO-IOC) accredited Indian Tsunami Early Warning Centre (ITEWC) as Tsunami Service Provider (TSP) for 28 Indian Ocean Rim (IOR) countries, along with Indonesia and Australia in 2011, for issuing regional warnings.

Recent Focus in Tsunami Warning Capability:

- The focus in recent times has been on enhancing community awareness and response through several capacity building activities, biennial Indian Ocean wide tsunami drills and piloting of the UNESCO-IOC Tsunami Ready initiative.
- Tsunami Ready is a community performance-based programme to promote tsunami preparedness through active collaboration of public, community leaders, and national and local emergency management agencies.
- The main objective of this programme is to improve coastal community's preparedness for tsunami emergencies, to minimize the loss of life and property and to ensure a structural and systematic approach in building community preparedness through fulfilling the best-practice indicators.
- Two villages of Odisha- Venkatraipur in Ganjam district and Noliasahi in Jagatsinghpur district are now ‘Tsunami Ready’.
- INCOIS is establishing a network of 35 stations to estimate the tectonic plate’s movements in real-time and measure the vertical displacements under the sea directly.

Source: TH

Model Code of Conduct: MP CM remark on a woman Case Study
GS-II | 27 October, 2020
Model Code of Conduct: MP CM remark on a woman Case Study

Recently, the Election Commission (EC) has found former Madhya Pradesh Chief Minister’s remark on a woman politician violative of the Model Code of Conduct (MCC).

What is a Model Code of Conduct?

- The MCC is a set of guidelines issued by the EC to regulate political parties and candidates prior to elections.
- It helps EC in keeping with the mandate it has been given under Article 324 of the Constitution, which gives it the power to supervise and conduct free and fair elections to the Parliament and State Legislatures.
- The MCC is operational from the date on which the election schedule is announced until the date of result announcement.
- The MCC does not have any statutory backing but is strictly enforced by the Election Commission.
- Certain provisions of the MCC are enforced through invoking provisions in other statutes like Indian Penal Code, 1860; Code of Criminal Procedure 1973 and RPA, 1951.

Historical Background

- The origins of the MCC lie in the Assembly elections of Kerala in 1960, when the State administration prepared a ‘Code of Conduct’ for political actors.
- Subsequently, in the Lok Sabha elections in 1962, the ECI circulated the code to all recognised political parties and State governments and it was wholeheartedly followed.
It was in 1991 after repeated flouting of the election norms and continued corruption, the EC decided to enforce the MCC more strictly.

Components of Model Code of Conduct

- **General Conduct**: Criticism of political parties must be limited to their policies and programmes, past record and work. Activities such as using caste and communal feelings to secure votes, criticising candidates on the basis of unverified reports, bribing or intimidation of voters, etc. are prohibited.
- **Processions**: If two or more candidates plan processions along the same route, organisers must establish a contact in advance to ensure that the processions do not clash. Carrying and burning effigies representing members of other political parties is not allowed.
- **Polling Day**: All authorised party workers at polling booths should be given suitable badges or identity cards. Identity slips supplied by them to voters shall be on plain (white) paper and shall not contain any symbol, name of the candidate or the name of the party.
- **Polling Booths**: Only voters, and those with a valid pass from the EC are allowed to enter polling booths.
- **Meetings**: Parties must inform the local police authorities of the venue and time of any meeting in time to enable the police to make adequate security arrangements.
- **Observers**: The EC will appoint observers to whom any candidates may report problems regarding the conduct of the election.
- **Party in power**: The MCC incorporated certain restrictions in 1979, regulating the conduct of the party in power.

1. Ministers must not combine official visits with election work or use official machinery for the same.
2. The party must avoid advertising at the cost of the public exchequer or using official mass media for publicity on achievements to improve chances of victory in the elections.
3. Ministers and other authorities must not announce any financial grants, or promise any construction of roads, provision of drinking water, etc.
4. Other parties must be allowed to use public spaces and rest houses and these must not be monopolised by the party in power.

- **Election manifestos**: Added in 2013, these guidelines prohibit parties from making promises that exert an undue influence on voters, and suggest that manifestos also indicate the means to achieve promises.

Should MCC be legally binding?

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Source: TH

In- House Procedure Against Judges of Higher Judiciary

GS-II | 27 October, 2020

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What is in the News?

- Recently, in a letter to the Chief Justice of India (CJI), Andhra Pradesh Chief Minister has accused the Supreme Court judge, Justice N.V. Ramana and some judges of Andhra Pradesh (AP) High Court of misconduct, corruption and political bias.
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- However, not all forms of misbehaviour will warrant removal. There could be other kinds of impropriety too.
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**What is the In-House Procedure:**

- Under the in-house procedure, when a complaint is received against a High Court judge, the CJI should decide if the issue is frivolous or serious.
- If a deeper probe is considered necessary, both the complaint and the judge’s response, along with the High Court’s Chief Justice’s comments, are recorded for further action.
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- Also, the in-house procedure does not give any separate provision to deal with complaints.
Way Forward

- Separation of powers between legislative, executive and judiciary has been regarded as a basic feature of our constitution in Kesavananda Bharati v State of Kerala, 1973.
- The constitution does not envisage supremacy of any of the three organs of the state. But the functioning of all the three organs is controlled by the constitution.
- Wherever interaction and deliberations among the three organs have been envisaged, a delicate balance and mutual respect are contemplated.

Source: TH
Polio FACTS

Polio is a crippling and potentially deadly viral infectious disease that affects the nervous system. There are three individual and immunologically distinct wild poliovirus strains:

- Wild Poliovirus type 1 (WPV1)
- Wild Poliovirus type 2 (WPV2)
- Wild Poliovirus type 3 (WPV3)

Symptomatically, all three strains are identical, in that they cause irreversible paralysis or even death. However, there are genetic and virological differences, which make these three strains separate viruses which must each be eradicated individually. WPV2 and WPV3 have been eradicated globally but WPV1 remains in circulation in Afghanistan and Pakistan.

**WPV2 was eradicated in 1999.**

World Polio Day 2019 marked a milestone in polio eradication as the independent Global Commission for the Certification of Poliomyelitis Eradication (GCC) declared WPV3 to be globally eradicated.

Spread:
The virus is transmitted by person-to-person mainly through the faecal-oral route or, less frequently, by a common vehicle (for example, through contaminated water or food).

It largely affects children under 5 years of age.

The virus multiplies in the intestine, from where it can invade the nervous system and can cause paralysis.

Symptoms:

- Most people with polio do not feel sick. Some people have only minor symptoms, such as fever, tiredness, nausea, headache, nasal congestion, sore throat, cough, stiffness in the neck and back, and pain in the arms and legs.
- In rare cases, polio infection causes permanent loss of muscle function (paralysis).
- Polio can be fatal if the muscles used for breathing are paralysed or if there is an infection of the brain.

Prevention and Cure: There is no cure, but it can be prevented through immunisation.

Vaccines:

- **Oral Polio Vaccine (OPV):** It is given orally as a birth dose for institutional deliveries, then primary three doses at 6, 10 and 14 weeks and one booster dose at 16-24 months of age.
- **Injectable Polio Vaccine (IPV):** It is introduced as an additional dose along with the 3rd dose of DPT (Diphtheria, Pertussis and Tetanus) under the Universal Immunisation Programme (UIP).

**World polio day 2020 24th Oct**

Every year, 24th October is observed as World Polio Day in order to call on countries to stay vigilant in their fight against the disease. It was established to commemorate the birth of Jonas Salk, who developed an Inactivated (killed) Polio Vaccine (IPV).

**Facts**

- In the last three decades, the **Global Polio Eradication Initiative (GPEI)**, led by national governments and the World Health Organisation (WHO), has been monitoring the disease situation globally.
- As per the WHO, since 1980, the cases of wild poliovirus have decreased by over 99.9% as a result of vaccination efforts made around the world.
- Polio Eradication: For a country to be declared polio-free, the wild transmission of all three kinds of Polioviruses has to be stopped. For eradication, cases of both wild and vaccine-derived polio infection have to be reduced to zero. Eradication of a disease refers to the complete and permanent worldwide reduction to zero new cases through deliberate efforts. If a disease has been eradicated, no further
control measures are required. However, elimination of a disease refers to reduction to zero or a very low defined target rate of new cases in a defined geographical area. It requires continued measures to prevent re-establishment of disease transmission.

- Recent Outbreaks:
  - In 2019, polio outbreaks were recorded in the Philippines, Malaysia, Ghana, Myanmar, China, Cameroon, Indonesia and Iran, which were mostly vaccine-derived in which a rare strain of the virus genetically mutated from the strain in the vaccine. According to the WHO, if the oral vaccine-virus is excreted and allowed to circulate in an unimmunised or under-immunised population for at least 12 months, it can mutate to cause infections.
  - Afghanistan and Pakistan are the two countries that are the last stronghold of the wild poliovirus.

Polio in India: India received polio-free certification by the WHO in 2014, after three years of zero cases.

- This achievement has been spurred by the successful pulse polio campaign in which all children were administered polio drops.
- The last case due to wild poliovirus in the country was detected on 13th January 2011.

Source: IE
Mission Indradhanush was launched by the Ministry of Health and Family Welfare, Government of India on December 25, 2014. Between 2009-2013 immunization coverage has increased from 61% to 65%, indicating only 1% increase in coverage every year. To accelerate the process of immunization by covering 5% and more children every year, Indradhanush mission has been adopted to achieve target of full coverage by 2020.

Objective

The Mission Indradhanush aims to cover all those children by 2020 who are either unvaccinated, or are partially vaccinated against vaccine preventable diseases. India’s Universal Immunisation Programme (UIP) provide free vaccines against 12 life threatening diseases, to 26 million children annually. The Universal Immunization Programme provides life-saving vaccines to all children across the country free of cost to protect them against Tuberculosis, Diphtheria, Pertussis, Tetanus, Polio, Hepatitis B, Pneumonia and Meningitis due to Haemophilus Influenzae type b (Hib), Measles, Rubella, Japanese Encephalitis (JE) and Rotavirus diarrhoea. (Rubella, JE and Rotavirus vaccine in select states and districts).

Implementation

Focused and systematic immunization drive will be through a “catch-up” campaign mode where the aim is to cover all the children who have been left out or missed out for immunization. Also the pregnant women are administered the tetanus vaccine, ORS packets and zinc tablets are distributed for use in the
Mission Indradhanush Phase I was started as a weeklong special intensified immunization drive from 7th April 2015 in 201 high focus districts for four consecutive months. During this phase, more than 75 lakh children were vaccinated of which 20 lakh children were fully vaccinated and more than 20 lakh pregnant women received tetanus toxoid vaccine.

The Phase II of Mission Indradhanush covered 352 districts in the country of which 279 are medium focus districts and remaining 73 are high focus districts of Phase-I. During Phase II of Mission Indradhanush, four special drives of weeklong duration were conducted starting from October 2015.

Phases I and II of the special drive had 1.48 crore children and 38 lakh pregnant women additionally immunized. Of these nearly 39 lakh children and more than 20 lakh pregnant women have been additionally fully immunized. Across 21.3 lakh sessions held through the country in high and mid-priority districts, more than 3.66 crore antigens have been administered.

Phase III of Mission Indradhanush was launched from 7 April 2016 covering 216 districts. Four intensified immunization rounds were conducted for seven days in each between April and July 2016, in these districts. These 216 districts have been identified on the basis of estimates where full immunization coverage is less than 60 per cent and have high dropout rates. Apart from the standard of children under 2, it also focussed on 5-year-olds and on increasing DPT booster coverage, and giving tetanus toxoid injections to pregnant women.

Overall, in the first three phases, 28.7 lakh immunisation sessions were conducted, covering 2.1 crore children, of which 55 lakh were fully immunised. Also, 55.9 lakh pregnant women were given the tetanus toxoid vaccine across 497 high-focus districts. Since the launch of Mission Indradhanush, full immunisation coverage has increased by 5 per cent to 7 per cent. Mission Indradhanush has resulted in a 6.7 % annual expansion in the immunization cover.

Phase IV of Mission Indradhanush was launched from 7 February 2017 covering the North-eastern states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. It has been rolled out in rest of the country during April 2017.

The four phases of Mission Indradhanush have reached to more than 2.53 crore children and 68 lakh pregnant women with life-saving vaccines.

The Ministry is being technically supported by WHO, UNICEF, Rotary International and other donor partners. Mass media, interpersonal communication, and sturdy mechanisms of monitoring and evaluating the scheme are crucial components of Mission Indradhanush.

Areas Under Focus

Mission Indradhanush targets 201 high priority districts in the first phase, 297 districts for the second phase in the year 2015 and 216 districts in the third Phase during 2016.
Within the districts, the Mission focuses on high risk settlements identified by the polio eradication programme. These are the pockets with low coverage due to geographic, demographic, ethnic and other operational challenges. Evidence has shown that most of the unvaccinated and partially vaccinated children are concentrated in these areas.

The following areas are targeted through special immunization campaigns:

1. High risk areas identified by the polio eradication programme. These include populations living in areas such as:
   - Urban slums with migration
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   - Underserved and hard to reach populations (forested and tribal populations etc.)

2. Areas with low routine immunization (RI) coverage (pockets with Measles/vaccine preventable disease (VPD) outbreaks).

3. Areas with vacant sub-centers: No ANM posted for more than three months.

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What is 2+2 Dialogue?

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Source: TH

Genome Sequencing
GS-III | 28 October, 2020

Genes

- Gene is a sequence of DNA or RNA that codes for a molecule that has a function.
They are made of DNA and is a subdivision of DNA. They are packed in Chromosomes.
Genes contain the bio-information that defines any individual.
Physical attributes like height, skin or hair colour, more subtle features and even behavioural traits can be attributed to information encoded in the genetic material.

A genome is the DNA or sequence of genes in a cell.

- Human genome is made up of 23 chromosome pairs with a total of about 3 billion DNA base pairs.
- Most of the DNA is in the nucleus in the form of chromosomes and the rest is in Mitochondria (cell's powerhouse). Genes make amino acids and proteins.
- Sequencing a genome means deciphering the exact order of base pairs in an individual.
- Exome is a portion of the gene responsible for making Proteins.
- There are 24 distinct human chromosomes:
  1. 22 autosomal chromosomes, plus the sex-determining X and Y chromosomes.
  2. Chromosomes 1-22 are numbered roughly in order of decreasing size.
  3. Somatic cells usually have one copy of chromosomes 1-22 from each parent, plus an X chromosome from the mother and either an X or Y chromosome from the father, for a total of 46.
- There are estimated 20,000-25,000 human protein-coding genes.

Genome sequencing

1. It determines the unique genetic traits, susceptibility (and resilience) to disease.
2. Now the youth will be told if they carry gene that makes them less responsive to certain types of medicines. Example, A certain gene make some people less responsive to Clopidogrel, a key drug to prevent strokes and heart attacks.
3. Genome sequencing is figuring out the order of DNA nucleotides, or bases, in a genome—the order of Adenine, Cytosine, Guanines, and Thymine that make up an organism's DNA.

Importance of Genome Sequencing

- Sequencing the genome is an important step towards understanding how genes works. Genes account for <25% of DNA in the genome. Studying entire genome sequence will help scientists study parts of genome outside the genes.
- It will represent a valuable shortcut, helping scientists find genes much more easily and quickly.
- A genome sequence does contain some clues about where genes are, even though scientists are just learning to interpret these clues.
- Genome sequencing of wild varieties of plants can be used to identify disease resistance and drought tolerance genes in various plants and develop new varieties of crop plants in lesser time.
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Why Genome sequencing?

- Ever since the human genome was first sequenced in 2003, it opened a fresh perspective on the link between disease and the unique genetic make-up of each individual.
- Nearly 10,000 diseases — including cystic fibrosis, thalassemia — are known to be the result of a single gene malfunctioning.
While genes may render some insensitive to certain drugs, genome sequencing has shown that cancer too can be understood from the viewpoint of genetics, rather than being seen as a disease of certain organs.

Human Genome Project

- The Human Genome Project was started in 1990, a 13 year long international research effort to determine the sequence of the human genome and identify the genes that it contains.
- The Project was coordinated by the National Institutes of Health and the U.S. Department of Energy.
- Not only did the completion of this project usher in a new era in medicine i.e. personalized medicine, but it also led to significant advances in the types of technology used to sequence DNA.

IndiGen initiative

- It is a programme for the Mapping of entire genome. CSIR will undertake genome sequencing of a sample of nearly 1000 Indian rural youth to determine unique genetic traits, susceptibility (and resilience) to disease. It is 1st of a kind initiative.
- It is managed by CSIR-Institute of Genomics and Integrative Biology (IGIB) and CSIR – Center for Cellular and Molecular Biology (CCMB).
- The aim is 2 fold:
  1. If it is possible to rapidly and reliably scan several genomes.
  2. Advice people on health risks in their gene i.e. disease detection.

Advantages

1. It is important for Precision medicine and Personalised medicine.
2. It will sequence a gene which hides the information of susceptibility to attain a disease.
3. Cancer, Heart strokes etc.
4. Understanding gene functioning.

Disadvantages

1. Not everyone who signs up will be guaranteed a scan.
2. It can breach ethical standards fixed in the development of Pluripotent stem cells.
3. It can also cause personalized biological attacks by anyone who has your gene sequence.
4. Breach of Right to Privacy.
5. The project is an adjunct to a much larger government-led programme Genome India Project, still in the works, to sequence at least 10,000 Indian genomes.
6. Under IndiGen, CSIR drafted 1000 youth from college through camps and educating attendees on genomics and the role of genes in disease. Those 1000 youth will get a Card and access to an app.

Department of Biotechnology under MoS&T has cleared the Genome India Project

- It is a gene-mapping project involving 20 leading institutions including IISc and IITs.
- The first stage of the project will look at samples of 10,000 persons from all over the country to form a grid that will enable the development of a reference genome.
Maritime Vision 2030

MAP OF INDIA SHOWING IMPORTANT WATERWAYS

REFERENCE
- IDENTIFIED
- DECLARED
- UNDER CONSIDERATION
- INDO-BANGLADESH PROTOCOL ROUTE

ASPIRE IAS
Source: PIB
What is it?

- It is a ten-year blueprint for the maritime sector which will be released by the Prime Minister of India at the Maritime India Summit in November 2020.
- It will supersede the Sagarmala initiative and aims to boost waterways, give a fillip to the shipbuilding industry and encourage cruise tourism in India.

Development Projects under Maritime Vision 2030:

- **Maritime Development Fund**: A Rs. 25,000-crore fund, which will provide low cost, long-tenure financing to the sector with the Centre contributing Rs. 2,500 crore over seven years.
- **Port Regulatory Authority**: A pan-India port authority will be set up under the new Indian Ports Act (to replace the old Indian Ports Act 1908) for enabling oversight across major and non-major ports, enhance institutional coverage for ports and provide for structured growth of the ports sector to boost investor confidence.
- **Eastern Waterways Connectivity Transport Grid project**: It will aim to develop regional connectivity with Bangladesh, Nepal, Bhutan and Myanmar.
- **Riverine Development Fund**: Calls for extending low cost, long-term financing for inland vessels with the support of a Riverine Development Fund (RDF) and for extending the coverage of the tonnage tax scheme (applicable to ocean-going ships and dredgers) to inland vessels also to enhance the availability of such vessels.
- **Rationalisation of Port Charges**: It will make them more competitive, besides doing away with all hidden charges levied by ship liners to bring in more transparency.
- **Promotion of Water Transport**: For decongestion of urban areas, and developing waterways as an alternative means of urban transport.

Significance:

- It will reduce logistics cost and increase the velocity of the cargo.
- It would enable direct movement of containers from factories, without intermediate handling at any container freight stations (CFSs), on a 24x7 basis.
- It will help in increasing Ease of Doing Business for the exporters, as the facility will bring efficiency and reduce dwell time, lower tariff cost and improve the competitiveness of shippers in international trade.

Source: PIB

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Himalayan zone is Tectonically Active

GS-I | 28 October, 2020

A Himalayan zone is Tectonically Active
Recently, a group of scientists from the Wadia Institute of Himalayan Geology (WIHG), Dehradun have found that the Indus-Tsangpo Suture Zone (ITSZ) of Himalaya is tectonically active.

What is a Suture zone?

- A suture zone is a linear belt of intense deformation, where distinct terranes, or tectonic units with different plate tectonic, metamorphic, and paleogeographic histories join together.
- These zones also provide the only record of deep oceanic crust and of ancient seafloor processes for roughly the first 90% of Earth’s history.
- Their study provides a means to understand the end-product of plate tectonic processes in time and space. In plate tectonics, sutures are seen as the remains of subduction zones together with the terranes possibly representing fragments of different tectonic plates.
- The suture zone is often represented on the surface by a mountain range comprising intensely deformed rocks.
- The Iapetus Suture from Great Britain, which is now concealed beneath younger rocks, and Indo-Tsangpo Suture well exposed in the Himalayas are some of the best examples of suture zones.

What is the news?

- The suture zone of Himalaya was conventionally thought to be locked.
- WIHG is an autonomous institute under the Department of Science and Technology (DST), Government of India.
- Tectonics is the scientific study of the deformation of the rocks that make up the Earth’s crust and the forces that produce such deformation.
- It deals with the folding and faulting associated with mountain building, the large-scale, gradual upward and downward movements of the crust and sudden horizontal displacements along faults.

Geological Evidences that Support the Finding:

- Sedimentary beds are tilted and thrust broken.
- Rivers are associated with uplifted terraces.
- Bedrock shows brittle deformation at much shallower depths.
- These deformed geological features were dated using the technique of Optically Stimulated Luminescence (OSL) and data of seismicity and denudation rate was also reviewed.
- **Optically-Stimulated Luminescence**: It is a late quaternary (geological time period that encompasses the most recent 2.6 million years) dating technique used to date the last time quartz sediment was exposed to light. As sediment is transported by wind, water or ice, it is exposed to sunlight and zeroed of any previous luminescence signal.
- **Seismicity**: It is the worldwide or local distribution of earthquakes in space, time, and magnitude. More specifically, it refers to the measure of the frequency of earthquakes in a region.
Denudation: It is a long term process in which the wearing and tearing of the surface of the Earth take place. It includes all those processes that lower relief and acts both chemically (chemical weathering) and physically (mechanical weathering).

The region of the ITSZ has been neo-tectonically active since the last 78000-58000 years. The ITSZ is a suture zone in the Ladakh region and marks the limit of the Indian plate where it collides with the Eurasian plate and is subducted below the latter. The ITSZ can be traced for more than 200 km and a wide variety of rock association along the ITSZ indicates that the collision at the plate boundary was of very complex nature.

The ITSZ was conventionally believed to be a locked zone till now.

This will have major implications in terms of earthquake study, prediction, understanding the seismic structure of the mountain chains well as its evolution.

Source: PIB
Polio FACTS

Polio is a crippling and potentially deadly viral infectious disease that affects the nervous system. There are three individual and immunologically distinct wild poliovirus strains:

- Wild Poliovirus type 1 (WPV1)
- Wild Poliovirus type 2 (WPV2)
- Wild Poliovirus type 3 (WPV3)

Symptomatically, all three strains are identical, in that they cause irreversible paralysis or even death. However, there are genetic and virological differences, which make these three strains separate viruses which must each be eradicated individually. WPV2 and WPV3 have been eradicated globally but WPV1 remains in circulation in Afghanistan and Pakistan.

**WPV2 was eradicated in 1999.**

World Polio Day 2019 marked a milestone in polio eradication as the independent Global Commission for the Certification of Poliomyelitis Eradication (GCC) declared WPV3 to be globally eradicated.

Spread:
The virus is transmitted by person-to-person mainly through the faecal-oral route or, less frequently, by a common vehicle (for example, through contaminated water or food).

It largely affects children under 5 years of age.

The virus multiplies in the intestine, from where it can invade the nervous system and can cause paralysis.

Symptoms:

- Most people with polio do not feel sick. Some people have only minor symptoms, such as fever, tiredness, nausea, headache, nasal congestion, sore throat, cough, stiffness in the neck and back, and pain in the arms and legs.
- In rare cases, polio infection causes permanent loss of muscle function (paralysis).
- Polio can be fatal if the muscles used for breathing are paralysed or if there is an infection of the brain.

Prevention and Cure: There is no cure, but it can be prevented through immunisation.

Vaccines:

- **Oral Polio Vaccine (OPV):** It is given orally as a birth dose for institutional deliveries, then primary three doses at 6, 10 and 14 weeks and one booster dose at 16-24 months of age.
- **Injectable Polio Vaccine (IPV):** It is introduced as an additional dose along with the 3rd dose of DPT (Diphtheria, Pertussis and Tetanus) under the Universal Immunisation Programme (UIP).

**World polio day 2020 24th Oct**

Every year, 24th October is observed as World Polio Day in order to call on countries to stay vigilant in their fight against the disease. It was established to commemorate the birth of Jonas Salk, who developed an Inactivated (killed) Polio Vaccine (IPV).

**Facts**

- In the last three decades, the Global Polio Eradication Initiative (GPEI), led by national governments and the World Health Organisation (WHO), has been monitoring the disease situation globally.
- As per the WHO, since 1980, the cases of wild poliovirus have decreased by over 99.9% as a result of vaccination efforts made around the world.
- Polio Eradication: For a country to be declared polio-free, the wild transmission of all three kinds of Polioviruses has to be stopped. For eradication, cases of both wild and vaccine-derived polio infection have to be reduced to zero. Eradication of a disease refers to the complete and permanent worldwide reduction to zero new cases through deliberate efforts. If a disease has been eradicated, no further
control measures are required. However, elimination of a disease refers to reduction to zero or a very low defined target rate of new cases in a defined geographical area. It requires continued measures to prevent re-establishment of disease transmission.

- Recent Outbreaks:
  - In 2019, polio outbreaks were recorded in the Philippines, Malaysia, Ghana, Myanmar, China, Cameroon, Indonesia and Iran, which were mostly vaccine-derived in which a rare strain of the virus genetically mutated from the strain in the vaccine. According to the WHO, if the oral vaccine-virus is excreted and allowed to circulate in an unimmunised or under-immunised population for at least 12 months, it can mutate to cause infections.
  - **Afghanistan and Pakistan are the two countries that are the last stronghold of the wild poliovirus.**

Polio in India: India received polio-free certification by the WHO in 2014, after three years of zero cases.

- This achievement has been spurred by the successful pulse polio campaign in which all children were administered polio drops.
- The last case due to wild poliovirus in the country was detected on 13th January 2011.

Source: IE
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**Genome Sequencing**

GS-III | 28 October, 2020

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3. It can also cause personalized biological attacks by anyone who has your gene sequence.
4. Breach of Right to Privacy.
5. The project is an adjunct to a much larger government-led programme Genome India Project, still in the works, to sequence at least 10,000 Indian genomes.
6. Under IndiGen, CSIR drafted 1000 youth from college through camps and educating attendees on genomics and the role of genes in disease. Those 1000 youth will get a Card and access to an app.

**Department of Biotechnology under MoS&T has cleared the Genome India Project**

- It is a gene-mapping project involving 20 leading institutions including IISc and IITs.
- The first stage of the project will look at samples of 10,000 persons from all over the country to form a grid that will enable the development of a reference genome.
Maritime Vision 2030

MAP OF INDIA SHOWING IMPORTANT WATERWAYS

REFERENCE
- IDENTIFIED
- DECLARED
- UNDER CONSIDERATION
- INDO-BANGLADESH PROTOCOL ROUTE

Maritime Vision 2030
What is it?

- It is a ten-year blueprint for the maritime sector which will be released by the Prime Minister of India at the Maritime India Summit in November 2020.
- It will supersede the Sagarmala initiative and aims to boost waterways, give a fillip to the shipbuilding industry and encourage cruise tourism in India.

**Development Projects under Maritime Vision 2030:**

- **Maritime Development Fund:** A Rs. 25,000-crore fund, which will provide low cost, long-tenure financing to the sector with the Centre contributing Rs. 2,500 crore over seven years.
- **Port Regulatory Authority:** A pan-India port authority will be set up under the new Indian Ports Act (to replace the old Indian Ports Act 1908) for enabling oversight across major and non-major ports, enhance institutional coverage for ports and provide for structured growth of the ports sector to boost investor confidence.
- **Eastern Waterways Connectivity Transport Grid project:** It will aim to develop regional connectivity with Bangladesh, Nepal, Bhutan and Myanmar.
- **Riverine Development Fund:** Calls for extending low cost, long-term financing for inland vessels with the support of a Riverine Development Fund (RDF) and for extending the coverage of the tonnage tax scheme (applicable to ocean-going ships and dredgers) to inland vessels also to enhance the availability of such vessels.
- **Rationalisation of Port Charges:** It will make them more competitive, besides doing away with all hidden charges levied by ship liners to bring in more transparency.
- **Promotion of Water Transport:** For decongestion of urban areas, and developing waterways as an alternative means of urban transport.

**Significance:**

- It will reduce logistics cost and increase the velocity of the cargo.
- It would enable direct movement of containers from factories, without intermediate handling at any container freight stations (CFSs), on a 24x7 basis.
- It will help in increasing Ease of Doing Business for the exporters, as the facility will bring efficiency and reduce dwell time, lower tariff cost and improve the competitiveness of shippers in international trade.

Source: PIB

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**Himalayan zone is Tectonically Active**

**GS-I | 28 October,2020**

A Himalayan zone is Tectonically Active
Recently, a group of scientists from the Wadia Institute of Himalayan Geology (WIHG), Dehradun have found that the Indus-Tsangpo Suture Zone (ITSZ) of Himalayas is tectonically active.

What is a Suture zone?

- A suture zone is a linear belt of intense deformation, where distinct terranes, or tectonic units with different plate tectonic, metamorphic, and paleogeographic histories join together.
- These zones also provide the only record of deep oceanic crust and of ancient seafloor processes for roughly the first 90% of Earth’s history.
- Their study provides a means to understand the end-product of plate tectonic processes in time and space. In plate tectonics, sutures are seen as the remains of subduction zones together with the terranes possibly representing fragments of different tectonic plates.
- The suture zone is often represented on the surface by a mountain range comprising intensely deformed rocks.
- The Iapetus Suture from Great Britain, which is now concealed beneath younger rocks, and Indo-Tsangpo Suture well exposed in the Himalayas are some of the best examples of suture zones.

What is the news?

- The suture zone of Himalaya was conventionally thought to be locked.
- WIHG is an autonomous institute under the Department of Science and Technology (DST), Government of India.
- Tectonics is the scientific study of the deformation of the rocks that make up the Earth’s crust and the forces that produce such deformation.
- It deals with the folding and faulting associated with mountain building, the large-scale, gradual upward and downward movements of the crust and sudden horizontal displacements along faults.

Geological Evidences that Support the Finding:

- Sedimentary beds are tilted and thrust broken.
- Rivers are associated with uplifted terraces.
- Bedrock shows brittle deformation at much shallower depths.
- These deformed geological features were dated using the technique of Optically Stimulated Luminescence (OSL) and data of seismicity and denudation rate was also reviewed.
- **Optically-Stimulated Luminescence**: It is a late quaternary (geological time period that encompasses the most recent 2.6 million years) dating technique used to date the last time quartz sediment was exposed to light. As sediment is transported by wind, water or ice, it is exposed to sunlight and zeroed of any previous luminescence signal.
- **Seismicity**: It is the worldwide or local distribution of earthquakes in space, time, and magnitude. More specifically, it refers to the measure of the frequency of earthquakes in a region.
• **Denudation:** It is a long term process in which the wearing and tearing of the surface of the Earth take place. It includes all those processes that lower relief and acts both chemically (chemical weathering) and physically (mechanical weathering).

• The region of the **ITSZ** has been neo-tectonically active since the last 78000-58000 years. The ITSZ is a suture zone in the Ladakh region and marks the limit of the Indian plate where it collides with the Eurasian plate and is subducted below the latter. The ITSZ can be traced for more than 200 km and a wide variety of rock association along the ITSZ indicates that the collision at the plate boundary was of very complex nature.

• The ITSZ was conventionally believed to be a locked zone till now.

• This will have major implications in terms of earthquake study, prediction, understanding the seismic structure of the mountain chains well as its evolution.

Source: PIB