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Polity and Governance

Highlights

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Pilot Project to Integrate Police Stations and Courts

A Supreme Court panel has launched a **pilot project** in Telangana's Warangal district to integrate **two crucial pillars of the criminal justice delivery system- the courts and police stations**.

- The Inter-operable **Criminal Justice System (ICJS)**, an initiative of the apex court's **e-Committee**, seeks to make live exchange of data possible between all criminal courts and police stations.
- **Justice MB Lokur**, heads Supreme Court's e-Committee, and is also the chairman of ICJS.
- This project is in alignment with **Digital India initiative** of the Government and will **boost e-governance**.
- This would help save time spent on completing paperwork and documentary evidence such as the first information reports (FIR) and charge sheets.
- Tracking court proceedings would become easier for investigating officers.
- The next phase would include **extending the ICJS data sharing to other states** and also expanding it to **prisons, forensic facilities, the prosecution system and juvenile homes**.
- The e-courts project is aimed at **computerisation** of districts and subordinate courts across the country.
- Several electronic services such as e-summons, SMS alerts to lawyers and litigants and e-filing have been initiated under the project.
- The **National Judicial Data Grid** hosts a dynamic repository of over 100 million cases.

The National Judicial Data Grid

- The e-Courts National portal (ecourts.gov.in) was **launched in August 2013**.
- The NJDG is working as National data warehouse for case data including the orders/judgments for Courts across the country.

- NJDG has specifically helped India improve its ranking in **World Bank's Ease of Doing Business Report**.

Integrated Criminal Justice System (ICJS)

- ICJS is an **OTP-enabled web platform** that integrates police, prison, and court records for government and police use.
- The ICJS covers suspect profiles combining data from prisons, FIR data from **Crime and Criminal Tracking Network and Systems (CCTNS)**, and courts.
- In its present form, it enters details such as a photo, state, religion, gender, nationality, age, type of case, marital status, whether or not the suspect is a drug addict, and biometric data.
- ICJS now proposes to include social media profiles, and details of immigration, prosecution, and National Investigative Agency records, allowing a "360 profile view".
- It is proposed to introduce a "risk score" (a score ranking threat-level of a criminal) for the profiles. The Ministry of Home Affairs, state governments, district authorities, and police stations will be able to view the statistics relevant to their geographies.

Crime and Criminal Tracking Network and Systems (CCTNS)

- CCTNS Project interconnects about 15000 Police Stations and additional 5000 offices of supervisory police officers across the country and digitize data related to FIR registration, investigation and charge sheets in all Police Stations.
- It will lead to the development of a national database of crimes and criminals.

Two Separate High Courts for Andhra Pradesh and Telangana

- Following a Supreme Court order to notify the bifurcation of the Andhra Pradesh and Telangana High Courts by January 1, the President has ordered the separation of the common Hyderabad High Court into the two separate High Courts of Andhra Pradesh and Telangana.
- Both will **function separately from January 1, 2019**.
- According to the Andhra Pradesh Reorganisation Act, 2014, both States were to have a common high court, till separate ones were formed.
- **Article 214** of the Constitution provides that there shall be a **High Court for each State**.
- With the creation of the new high court, the **country now has 25 high courts**.
- It will **have 15 judges besides the chief justice**.
- The principal seat of the Andhra Pradesh High Court is Amaravati, the capital of the State. The High Court in Hyderabad will function separately as the High Court of the State of Telangana.

National Commission for Indian System of Medicine Bill, 2018

The Cabinet has approved the draft **National Commission for Indian Systems of Medicine (NCIM) Bill, 2018**, which seeks to replace the existing regulator Central Council for Indian Medicine (CCIM) with a new body to ensure transparency.

- This is on the **lines of National Medical Commission Bill** which is meant to regulate allopathy medicine system.
- The NCIM will promote availability of affordable healthcare services in all parts of the country.
- The Cabinet has also approved the draft **National Commission for Homoeopathy Bill, 2018**, aimed at replacing the **Central Council for Homoeopathy**, which is the current regulatory body for homoeopathy.

Salient Features

- The Bill provides for the constitution of a **National Commission with four autonomous boards** entrusted with conducting overall education of Ayurveda, Unani, Siddha & Sowa Rigpa under their respective Boards. In order to ensure transparency the draft Bill also proposes a **common entrance exam and an exit exam** that all graduates will have to clear to obtain their license to practice Indian medicine.
- Further, a **teacher's eligibility test** has been proposed in the Bill to assess the standard of teachers before appointment and promotions.
- Establishes **two common boards— board of assessment and rating** to assess and grant permission to educational institutions of Indian systems of medicine; and a **board of ethics and registration** of practitioners of Indian systems of medicine to maintain a National Register and deal with ethical issues.

Indian Systems of Medicine

- India has recognized **six systems of medicine viz. Ayurveda, Siddha, Unani, Yoga and Naturopathy, Homoeopathy and Sowa Rigpa**.
- The **Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) was formed on November 9, 2014** to ensure the optimal development and propagation of AYUSH systems of healthcare.
- Earlier it was known as the Department of Indian System of Medicine and Homeopathy (ISM&H) which was created in March 1995 and renamed as Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) in November 2003, with focused attention for development of Education and Research in Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy.

Unani System of Medicine

- Unani system originated in Greece and its foundation was laid by **Hippocrates**.
- However, the system owes its **present form to the Arabs** who not only saved much of the Greek literature by rendering it into Arabic but also enriched the medicine of their day with their own contributions.
- It was introduced in **India by the Arabs and Persians** sometime around the eleventh century.
- India has the largest number of Unani educational, research and health care institutions.

Ayurveda

- The word 'Ayurveda' is derived from the fusion of two separate words- '**Āyu**' i.e. **life** and '**veda**' i.e. **knowledge**. Thus in literal meaning Ayurveda is the science of life.
- It aims to keep structural and functional entities in a state of equilibrium, which signifies good health (Swasthya) through various **procedures, regimen, diet, medicines and behavior change**.

Siddha system

- Siddha system of medicine is practiced in some parts of **South India especially in the state of Tamil Nadu**.
- The term 'Siddha' has come from 'Siddhi'- which means achievement. Siddhars were the men who achieved supreme knowledge in the field of **medicine, yoga or tapa (meditation)**.

Sowa-Rigpa

- "Sowa-Rigpa" commonly known as **Tibetan system** of medicine is one of the oldest, living and well documented medical tradition of the world.
- It has been originated from Tibet and popularly practiced in India, Nepal, Bhutan, Mongolia and Russia. The majority of theory and practice of **Sowa-Rigpa is similar to "Ayurveda"**.
- Sowa-Rigpa is based on the principle that bodies of all the living beings and non living objects of the universe are composed of **five Cosmo physical elements of Jung-wa-nga (Prithvi, Jal, Agni, Vayu and Akash)**.
- When the proportion of these elements is in imbalance in our body, disorder results.
- It was **recognized by the Government in 2011**.

Homoeopathy

- The word 'Homoeopathy' is derived from two **Greek words**, Homois meaning similar and pathos meaning suffering. It was introduced in India in **18th Century**.
- Homoeopathy simply means treating diseases with remedies, prescribed in minute doses, which are capable of producing symptoms similar to the disease when taken by healthy people, i.e. principle of – "**Similia Similibus Curantur**" which means "**likes are cured by likes**".
- It takes a **holistic approach** towards the sick individual through promotion of inner **balance at mental, emotional, spiritual and physical levels**.

Naturopathy

- Naturopathy is a cost effective drugless, non-invasive therapy involving the use of natural materials for health care and healthy living.
- It is based on the theories of vitality, boosting the selfhealing capacity of the body and the principles of healthy living.
- Naturopathy advocates living in harmony with constructive principles of Nature on the physical, mental, social and spiritual planes.

Yoga

- The word "Yoga" comes from the Sanskrit word "yuj" which means "to unite or integrate."
- Yoga is about the union of a person's own consciousness and the universal consciousness.
- It is primarily a way of life, first propounded by Maharshi Patanjali in systematic form Yogsutra.
- The discipline of Yoga consists of eight components namely, restraint (Yama), observance of austerity (Niyama), physical postures (Asana), breathing control (Pranayam), restraining of sense organs (Pratyahar), contemplation (Dharna), meditation (Dhyan) and Deep meditation (Samadhi).
- These steps in the practice of Yoga have the potential to elevate social and personal behavior and to promote physical health by better circulation of oxygenated blood in the body, restraining the sense organs and thereby inducing tranquility and serenity of mind and spirit.

Cabinet Approved Changes to POCSO Act

The Union Cabinet has approved amendments to the Protection of Children from Sexual Offences (POCSO) Act, 2012 to make punishment more stringent for committing sexual crimes against children.

- The categories of sexual crimes against children have been increased from 20 to 21 under the amendment.
- The 21 categories under aggravated penetrative sexual assault, in addition to the death penalty for sexually assaulting children below the age of 12, cover child victims under the age of 18 years, who have been subject to penetrative sexual assault by a police officer or a member of the armed forces or security forces, by a public servant, a relative, the

staff of a jail or remand home or protection home, staff of a hospital, educational institution, or religious institution among others.

- It also includes the gangrape of a child or use of deadly weapons during penetrative sexual assault, a sexual assault that incapacitates the child physically or mentally, makes a girl child pregnant, inflicts the child with HIV or any life-threatening disease.

Key Amendments

- The Bill increases the minimum punishment for penetrative sexual assault from seven years to ten years. It further adds that if a person commits penetrative sexual assault on a child below the age of 16 years, he will be punishable with imprisonment between 20 years to life, along with a fine.
- The Bill adds two more grounds to the definition of aggravated penetrative sexual assault. These include: (i) assault resulting in the death of child, and (ii) assault committed during a natural calamity.
- Currently, the punishment for aggravated penetrative sexual assault is imprisonment between 10 years to life, and a fine. The Bill increases the minimum punishment from ten years to 20 years, and the maximum punishment to death penalty.
 - The amendment will include the death penalty in all cases of aggravated penetrative sexual assault against children, both boys and girls, below the age of 18, thus making the **Act gender neutral**.
 - The maximum **punishment of death** will also be applicable when sexual assault victims are children with mental or physical disabilities, in cases of repeat offenders, rape and attempt to murder, and rape during communal violence.
- The Bill adds two more offences to the definition of aggravated sexual assault. These include: (i) assault committed during a natural calamity, and (ii) administering any hormone or any chemical substance, to a child for the purpose of attaining early sexual maturity.
 - The Ministry of Women and Child Development has cited reported rapes of young girls in the aftermath of Kedarnath floods and that children constitute 50-60% of victims of calamities.
- **Pornographic purposes:** Under the Act, a person is guilty of using a child for pornographic purposes if he uses a child in any form of media for the purpose of sexual gratification. The Act also penalises persons who use children for pornographic purposes resulting in sexual assault.

- The Act penalises storage of pornographic material for commercial purposes with a punishment of up to three years, or a fine, or both.
 - The Bill amends this to provide that the punishment can be imprisonment between three to five years, or a fine, or both.
 - In addition, the Bill adds two other offences for storage of pornographic material involving children. These include: (i) failing to destroy, or delete, or report pornographic material involving a child, and (ii) transmitting, propagating, or administering such material except for the purpose of reporting it.

Analysis

- The amendments may protect the interest of vulnerable children in times of distress and ensure their safety and dignity.
- The amendment is expected to discourage the trend of child sexual abuse by acting as a deterrent due to strong penal provisions incorporated in the Act.
- However data shows that less than 3% of all POCSO cases end in convictions and experts warn against the chilling effect the death penalty may have on reporting the crime.
- Systemic changes in law enforcement and prosecution hold the key to tackling child sexual abuse.

Protection of Children from Sexual Offences (POCSO) Act, 2012

- The POCSO Act, 2012 was enacted to Protect the Children from Offences of Sexual Assault, Sexual harassment and pornography with due regard for safeguarding the interest and well-being of children.
- The Act defines **a child as any person below eighteen years of age**, and regards the best interests and welfare of the child as matter of paramount importance at every stage, to ensure the healthy physical, emotional, intellectual and social development of the child.
- The Act **defines different forms of sexual abuse**, including **penetrative and non penetrative assault**, as well as **sexual harassment and pornography**.
- The Act also casts the police in the role of child protectors during the investigative process.
- The Act stipulates that a case of child sexual abuse **must be disposed of within one year** from the date the offence is reported.

Key Terms under POCSO Act, 2012

- **Penetrative sexual assault:** Under the Act, a person commits “penetrative sexual assault” if he:
 - penetrates his penis into the vagina, mouth, urethra or anus of a child, or
 - makes a child do the same, or
 - inserts any other object into the child’s body, or
 - applies his mouth to a child’s body parts.
- **Aggravated penetrative sexual assault:** The Act defines certain actions as “aggravated penetrative sexual assault”.
 - These include cases when a police officer, a member of the armed forces, or a public servant commits penetrative sexual assault on a child.
 - It also covers cases where the offender is a relative of the child, or if the assault injures the sexual organs of the child or the child becomes pregnant, among others.
- **Aggravated sexual assault:** Under the Act, “sexual assault” includes actions where a person touches the vagina, penis, anus or breast of a child with sexual intent without penetration. “Aggravated sexual assault” includes cases where the offender is a relative of the child, or if the assault injures the sexual organs of the child, among others.

POCSO e-Box

- Protection of Children from Sexual Offences (POCSO) e-Box **launched in 2016 is an online complaint box for reporting child sexual abuse.**
- It is a **National Commission for Protection of Child Rights (NCPCR)** initiative to help children report such crimes directly to the Commission.
- The online complaint management system enables **easy reporting and timely action against the offenders under the POCSO Act, 2012.**
- E-Box is very simple to operate and help in maintaining the confidentiality of the complaint.

SDG India Index

The NITI Aayog has released its SDG India Index which intends to provide a holistic view on the social, economic and environmental status of the country and its States.

Index

- First of its kind ‘SDG India Index’ has been developed in collaboration with the Ministry of Statistics & Programme Implementation (MoSPI), Global Green Growth Institute, United Nations in India, and NITI Aayog.
 - In September 2016, MoSPI developed a National Indicator Framework (NIF) which is a consolidated list of possible national indicators. It consists of 306 statistical indicators to serve as a backbone for monitoring of SDGs.
- NITI Aayog has prepared the SDG India Index spanning across 13 out of 17 SDGs (leaving out Goals 12, 13, 14 and 17).
- Being the baseline report, it does not consider time series comparison of data. As a result, the SDG India Index provides information on where a State/UT currently stands on each of the indicators considered, and presents incremental change in subsequent versions.
- Classification Criteria based on SDG India Index Score is as follows: Aspirant: 0-49; Performer: 50-64; Front Runner: 65-99; Achiever: 100.

Key Findings

- Himachal Pradesh, Kerala and Tamil Nadu have emerged as the front runners in the race to achieve key sustainable development goals (SDGs) in a ranking of states released by NITI Aayog.
- Kerala’s top rank is attributed to its superior performance in providing good health, reducing hunger, achieving gender equality and providing quality education.
- Himachal Pradesh ranks high on providing clean water and sanitation, in reducing inequalities and preserving mountain ecosystem.
- The toppers in gender equality, Sikkim and Union territories Andaman and Nicobar islands and Chandigarh have crossed the halfway mark in reaching the goals.
- Jharkhand, Odisha and Nagaland are among the states that have a lot more ground to cover in the overall rankings.

Limitations

- **Exclusion of goals:** SDG India Index does not currently cover Goals 12, 13 and 14 largely on account of unavailability of comparable data across States and UTs. Further, SDG 17 was left out as it focuses on international partnerships.

- **Indicators emerging from the State schemes not included:** The Indicators focus largely on data sources emerging from central official statistical systems and the respective Union Ministries/ Departments.

- **Limitation of equal weightage:** Assigning equal weightage for all indicators across all Goals may lead to biased results. Additionally, some indicators may be less relevant to some States. For example, indicators like the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Pradhan Mantri Gram Sadak Yojana (PMGSY) have less relevance in States like Punjab and Haryana because they have already been performing better on these targets. Thus, their progress on these schematic indicators will seem less in comparison to other States.
- **Missing data:** Data for a few States /UTs is not available for some indicators.

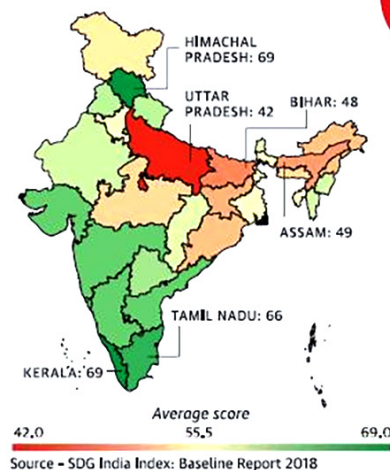
Background

- The Sustainable Development goals were adopted at the UN Sustainable Development Summit in September, 2015.
- They came into force from January 1st, 2016 and have 2030 as deadline for achieving the targets.
- The success of Agenda 2030 globally will depend, on the progress India makes on the SDGs. It is not just the size of India's population (about 17% of the world population) or the scale of its interventions that makes it so critical to the SDGs, but its unique convergence of extraordinary economic growth, commitment to sustainability, and social and technological innovations.

Quantifying development

Kerala and Himachal Pradesh are progressing at a faster rate towards the Sustainable Development Goals set for 2030, a NITI Aayog report said on Friday

The progress was measured using a score based on each aggregate performance across 13 SDGs



57/100
India's overall score

WHAT THE SCORES MEAN
They reflect a State's progress in goals, such as ending poverty, ensuring healthy lives, gender equality and sustainable water management, among others

- U.P., Bihar and Assam are progressing at a slower rate
- The score ranges between 0 and 100. If a State's score is 100, it means that it has achieved the national target set for 2030
- If the score is 0, it means that the State's progress is the worst among all



- India has also emerged as a global leader on the international climate action agenda and an enabler of sustainable development for developing countries around the world.
- This combined with some of the world's largest and most ambitious social programmes including housing for all, energy for all, urbanization, health and nutrition, and digital and financial inclusion, make it a leading force for the SDGs globally.
- This SDG India Index by NITI Aayog is an important first step in enabling comprehensive tracking of the country's progress, and in benchmarking SDGs for both central and State governments across the country serving



Note:

its twin mandate to oversee the implementation of SDGs in the country, and also promote Competitive and Cooperative Federalism among States and UTs.

- The SDG India Index embodies the five Ps of the global SDG movement – people, planet, prosperity, partnership and peace.

Way Forward

- The SDG India Index will help every State and Union Territory identify their strengths and areas of opportunity, relative to their peers, and to identify the steps they can take towards achieving the Sustainable Development Goals by 2030.
- It is also important to note that this exercise has revealed that there is an urgent need for the improvement of statistical systems to generate data that helps in effective monitoring of SDGs at the national and State level on a real-time basis. The selection of indicators for present exercise was constrained by the availability of data. Improved data availability and quality in the future will make the index more robust.
- Going forward, the report should be used for identifying priority areas that require interventions and also to strengthen capacities for monitoring SDGs.

Lok Sabha Passes Surrogacy Bill

The Lok Sabha has passed Surrogacy (Regulation) Bill 2016, banning commercial renting of wombs and allowing only “altruistic surrogacy”.

- The Bill was approved by the Cabinet in August 2016. It was introduced in the Lok Sabha in November 2016 and was later referred to a parliamentary standing committee on health and family welfare in January 2017.

Key Provisions

- The Bill seeks to regulate the surrogacy part of a flourishing infertility industry in the country.
- It defines ‘surrogacy’ as a practice which a woman undertakes to give birth to a child for another couple and agrees to hand over the child to them after birth.
- It allows ‘altruistic surrogacy’ — wherein only the medical expenses and insurance coverage is provided by the couple to the surrogate mother during pregnancy. No other monetary consideration will be allowed.

- It allows surrogacy for infertile married (at least five years) Indian couples only. The female must be between 23 and 50 years and the male 26 and 55 years; and they cannot have any surviving child (biological, adopted or surrogate).
 - However, this would not include a ‘child who is mentally or physically challenged or suffers from life threatening disorder or fatal illness.’
- Only a close relative of the couple, who is able to provide a medical fitness certificate, can be a surrogate mother. She should have been married, having a child of her own, and must be between 25 and 35 years, but can be a surrogate mother only once.
- The stated objective of the new Bill is to constitute a National Surrogacy Board, State Surrogacy Board and appointment of authorities for regulation of practice and process of surrogacy. In short, the law is meant to end commercial surrogacy or, as the Supreme Court had once in 2009, termed “fertility tourism” in the country.

Challenges

- It does not allow single women or men, or gay couples to go in for surrogacy.
- Despite a similar stringent law, the Transplantation of Human Organs Act, 1994 illegal organ commerce continues to thrive. Therefore, the issue needs to be handled firmly.
- **Adoption of a child borne out of surrogacy:** An unhealthy child borne out of surrogacy is often not accepted by the parents due to the lack of legal safeguards for the child and the surrogate mother. The Bill has not addressed this issue comprehensively.
- The Parliamentary Standing Committee (PSC) has rejected a blanket ban on commercial surrogacy proposed in the Bill. It said that commercial surrogacy could trigger a black market for surrogacy services in India.
 - The whole surrogacy service could go underground which would lead to increased exploitation with no mechanism for protection of any of the parties involved in the surrogacy arrangement.
 - It could result in trafficking of surrogate mothers to foreign nations or safe surrogacy havens around the globe for monetary returns.
 - The provision of no monetary incentive in the proposed Bill except medical expenses can make surrogacy similar to “forced labour” which is prohibited under Article-23 of the Constitution.

- Endorsing altruistic surrogacy will enforce emotional and social pressure on close female relatives without any compensation for immense emotional and bodily labour of gestation involved in surrogacy as well as loss of livelihood.

Why the Need for a Surrogacy Bill

- **Fertility tourism:** India has emerged as a hub for infertility treatment, attracting people from the world over with its state-of-the-art technology and competitive prices to treat infertility.
- **End exploitation:** India has emerged as a surrogacy hub for couples from different countries and there have been reports of unethical practices such as exploitation of surrogate mothers, abandonment of children born out of surrogacy and cases of intermediaries importing human embryos and gametes.
- Commercial surrogacy has been legal in India since 2002 under the guidelines of the Indian Council of Medical Research (ICMR). The Law Commission of India had also recommended prohibiting commercial surrogacy and allowing only ethical altruistic surrogacy to the needy Indian citizens by enacting a suitable legislation.

Surrogacy

- When a couple wants a baby but is unable to have a child because either or both partners are medically unfit to conceive, another woman (surrogate mother) is artificially inseminated with the sperm of the father. She then carries the child full term and delivers it for the couple.
- In such a case, the surrogate mother is the biological mother of the child. In instances when the father's sperm cannot be used, a donor sperm can also be used. This is traditional surrogacy.
- In gestational surrogacy, eggs from the mother are fertilised with the father's/donor's sperm and then the embryo is placed into the uterus of the surrogate, who carries the child to term and delivers it. In this case, the biological mother is still the woman whose eggs are used, while the surrogate is called the birth mother.

The Consumer Protection Bill 2018

Recently, the Lok Sabha has passed the Consumer Protection Bill 2018.

- The Bill seeks to replace the three-decade-old Consumer Protection Act, 1986.

Rights of Consumers

- Right to Safety
- Right to Information
- Right to Choose
- Right to Seek Redressal
- Right to Education
- Right to be Heard

National Consumer Day

- Every Year **December 24** is observed as National Consumer Day with a specific theme in India. This year the National Consumer Day is celebrated with the theme **"Timely Disposal of Consumer Complaints"**.
- It is celebrated on this day as the **Consumer Protection Act, 1986** had received the assent of the President.

Key Provisions of the Bill

- The Bill enforces consumer rights and provides a mechanism for redressal of complaints regarding the defect in goods and deficiency in services.
- Under the Bill, **Consumer Disputes Redressal Commissions** will be set up at the District, State and National levels for adjudicating consumer complaints.
 - Appeals from the District and State Commissions will be heard at the next level and from the National Commission by the Supreme Court.
- The Bill sets up a **Central Consumer Protection Authority** to promote, protect and enforce consumer rights as a class. It can issue safety notices for goods and services, order refunds, recall goods and rule against misleading advertisements.
 - It will be headed by a Chief Commissioner and comprise other Commissioners. It will have an investigation arm headed by a Director General. It may also file complaints before the Consumer Disputes Redressal Commissions.
- The Bill establishes **Consumer Protection Councils** at the district, state, and national levels to render advice on consumer protection.
 - The Central and State Council will be headed by the Minister-in-charge of Consumer Affairs at the central and state level, respectively. The District Council will be headed by the District Collector.

Note:

- The Bill also lists punitive actions against those who are found manufacturing, storing, distributing, selling, or importing products that are spurious or contain adulterants.
- If a consumer suffers an injury from a defect in a good or a deficiency in service, he may file a claim of product liability against the manufacturer, the seller, or the service provider.
- The Bill defines contracts as 'unfair' if they significantly affect the rights of consumers. It also defines unfair and restrictive trade practices.
- The **case can be filed from anywhere**, unlike the existing law which allows the consumer to register the complaint only from the same place of purchase of the product or where the service is availed.

Provision	1986 Act	2018 Bill
Ambit of Law	<ul style="list-style-type: none"> ➤ All goods and services for consideration. ➤ Free and personal services are excluded. 	<p>All goods and services, including telecom and housing construction, and all modes of transactions (online, teleshopping, etc.).</p> <p>Free and personal services are excluded.</p>
Unfair Trade Practices	Includes six types of such practices, like false representation, misleading advertisements.	<p>Adds three types of practices to the list:</p> <ul style="list-style-type: none"> ➤ failure to issue a bill or receipt; ➤ refusal to accept a good returned within 30 days; ➤ disclosure of personal information given in confidence
Product liability	No provision.	<ul style="list-style-type: none"> ➤ Claim for product liability can be made against the manufacturer, service provider, and seller. ➤ Compensation can be obtained by proving one of the several specified conditions in the Bill.
Regulator	No provision.	Establishes the Central Consumer Protection Authority (CCPA)
Pecuniary jurisdiction of Commissions	<ul style="list-style-type: none"> ➤ District: Up to Rs 20 lakh. ➤ State: Between Rs 20 lakh and up to Rs one crore. ➤ National: Above Rs one crore. 	<ul style="list-style-type: none"> ➤ District: Up to Rs one crore. ➤ State: Between Rs one crore and up to Rs 10 crore. ➤ National: Above Rs 10 crore.
Appointment	Selection Committee (comprising a judicial member and other officials) will recommend members on the Commissions.	No provision for Selection Committee. The central government will appoint through notification.
Penalties	Imprisonment between one month and three years or fine between Rs 2,000 to Rs 10,000, or both.	Imprisonment up to three years, or a fine not less than Rs 25,000 extendable to Rs one lakh, or both.
E-commerce	No provision.	<ul style="list-style-type: none"> ➤ Defines direct selling, e-commerce and electronic service provider. ➤ The central government may prescribe rules for preventing unfair trade practices in e-commerce and direct selling.

Note:

Data Interception by Government

Recently the government has authorised **10 intelligence and investigating agencies to intercept, monitor and decrypt "any information"** generated, transmitted, received or stored in "any computer".

- The 10 agencies include **Intelligence Bureau, Narcotics Control Bureau, Enforcement Directorate, Central Board of Direct Taxes, Directorate of Revenue Intelligence, Central Bureau of Investigation, National Investigation Agency, Cabinet Secretariat (RAW), Directorate of Signal Intelligence** (For service areas of Jammu & Kashmir, North-East and Assam only), and **Commissioner of Police, Delhi**.
- Any subscriber or service provider or any person in charge of any computer resource is bound to extend all facilities and technical assistance to these agencies.

Legitimacy of the Notification

- **Provision for interception of information** from computer resources exists since 2000. **Section 69(1) of the Information Technology Act, 2000** allowed this in the interest of the **country's sovereignty and integrity, security of the state**, friendly relations with foreign states, or public order or for preventing incitement to the commission of any cognizable offence.
- **Section 69 was amended in 2008** to enable the Centre and the State governments to **"intercept, monitor or decrypt" any information** transmitted through, received or stored in a computer.
- Each case of interception, monitoring, decryption is to be approved by the competent authority i.e. **Union**

Home secretary. These powers are also available to the competent authority in the State governments as per **IT (Procedure and Safeguards for Interception, Monitoring and Decryption of Information) Rules 2009**.

- All such cases of interception or monitoring or decryption are to be placed before the **review committee headed by Cabinet Secretary**, which shall meet at least once in two months to review such cases. In case of **State governments**, such cases are reviewed by a **committee headed by the Chief Secretary concerned**.
- The notification does not confer any new powers and is **analogous to the authorisation issued under the Telegraph Act 1885 which allowed interception of phone calls**.
- Every individual case will continue to require prior approval of the Union Home Ministry or the State government. The Home Ministry has not delegated its power to any law enforcement or security agency.

Criticism

- The Government notification giving a **blanket approval to electronic surveillance is a direct assault on civil liberties and personal freedom of citizens**. It may amount to creation of a **'surveillance state'**.
- It is seen as a **challenge to the 2017 K.S. Puttaswamy (privacy) judgment** of the Supreme Court, which directed the government to protect informational privacy of every individual.

Conclusion

- The Government should **strike a balance between national security and individual privacy** as in K. S. Puttaswamy judgment, the Supreme Court had asked the government to always carefully and sensitively balance individual privacy and the legitimate concerns of the state, even if national security was at stake.



Economic Scenario

Highlights

- Strategy for New India @ 75 (11)
- Delta Ranking of the Aspirational Districts (13)
- Bogibeel Bridge (14)
- Packaging in Jute Bags Made Mandatory (14)

Strategy for New India @ 75

NITI Aayog has released 'Strategy for New India @ 75' document with an aim to **accelerate economic growth to 9-10%** and make the country a **USD 4-trillion economy by 2022-23**. The document replaces the now-defunct five-year plans.

- The document defines the strategy for 2022-23 across **forty-one areas**. Each chapter includes:
 - Objectives for 2022,
 - Progress already made,
 - Binding constraints,
 - Way forward for achieving stated objectives.
- The document was prepared after **extensive consultation** with over 800 stakeholders from within the government – central, state and district levels.
- The document has been disaggregated under **four sections: Drivers, Infrastructure, Inclusion and Governance**.

Drivers

- Drivers include chapters on growth and employment, doubling of farmers' incomes, upgrading the science, technology and innovation ecosystem and promoting sunrise sectors like fintech and tourism.

Sunrise Sector: It is a new industry that is expanding rapidly and expected to rise further in the future. It is characterised by high growth, number of startups, increased investment especially through venture capital funding.

Key Recommendations in the Section on Drivers

- **Economy:** Accelerate the GDP growth rate to raise the economy's size in real terms from USD 2.7 trillion in 2017-18 to nearly **USD 4 trillion by 2022-23**.

- The paper sets an **annual inflation target of 2% to 6%** by 2022-23.
- Increase the **investment rate in housing & infrastructure** as measured by gross fixed capital formation (GFCF) from the present 29% to 36% of GDP by 2022.
- **Rationalise direct taxes** for both corporate tax and personal income tax, ease the tax compliance burden and eliminate direct interface between taxpayers and tax officials using technology.
- **Increase tax-GDP ratio to 22% of GDP by 2022-23**. India's tax-GDP ratio is around 17%, half of the average 35% for countries part of Organisation for Economic Co-operation and Development (OECD).
- States should undertake greater mobilisation of their taxes such as **property tax** and take steps to **improve administration of GST** to better tax collections.
- The strategy paper also called for having **flexible fiscal deficit targets**, governance reforms in **public sector banks**, performance assessment of executives and **increased flexibility in personnel policy**.
- **Agriculture:** Convert farmers to '**agripreneurs**' by further expanding **e-National Agriculture Markets (e-NAM)** and replacing the Agricultural Produce Marketing Committee Act with the Agricultural Produce and Livestock Marketing Act.
- The document is silent on farm loan waivers but has suggested the concept of a minimum support price for produce be replaced with that of a **Minimum Reserve Price**. The latter should be the starting point for auctioning at official wholesale markets, so that **farmers get at least a basic income**.
- Consider **replacing** the Commission on Agricultural Costs and Prices (**CACP**) by an **agriculture tribunal** in line with the provisions of Article 323B of the Constitution.

- The **Pradhan Mantri Fasal Bima Yojana** needs to promote **weather-based insurance**.
- Give a strong push to **'Zero Budget Natural Farming'** techniques that reduce costs, improve land quality and increase farmers' incomes.
- **Employment:** Codification of labor laws, upscale and expand apprenticeships.
- Enhance female labour force participation, by ensuring employers' adherence to the **Maternity Benefit (Amendment) Act, 2017**, and the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.
- **Minerals:** Launch a mission **"Explore in India"** by revamping minerals exploration and licensing policy.

Pradhan Mantri Fasal Bima Yojana

PMFBY was launched in 2016 to replace the National Agricultural Insurance Scheme (NAIS) and Modified National Agricultural Insurance Scheme (MNAIS).

It fixes a uniform premium of 2% of the value of sum insured to be paid by farmers for all kharif crops. 1.5% for all rabi crops, 5% for annual commercial and horticultural crops.

Zero Budget Natural Farming

Zero Budget Natural Farming (ZBNF) refers to a set of Natural Farming methods where the cost of growing and harvesting Plants is effectively Zero. It believes in natural growth of crops without adding any fertilizers and pesticides or any Foreign Elements to crops or Land.

Maternity Benefit (Amendment) Act, 2017

This amends the Maternity Benefit Act, 1961 that protects women's employment, and women's and children's well-being during maternity, with paid absence and related benefits like extending paid maternity leave for women employees with less than two surviving children, from the original 12 weeks to 26 weeks.

Infrastructure

- Infrastructure deals with the physical foundations of growth.

Key Recommendations in Section of Infrastructure

- **Transport:** Expedite the establishment of already approved **Rail Development Authority (RDA)**, for an integrated, transparent and dynamic pricing mechanism for the railways.

- Double the **share of freight transported** by coastal shipping and inland waterways.
- Develop an **IT-enabled platform** for integrating different modes of transport and promoting multi-modal and digitized mobility.
- **Private investment** in infrastructure should be focused on through a renewed public-private partnership model.
- **Digital India:** Aim to **deliver all government services** at the state, district, and gram panchayat level digitally by 2022-23.

Inclusion

- Inclusion deals with investing in the capabilities of all of India's citizens. The **three themes** in this section revolve around the dimensions of **health, education and mainstreaming of traditionally marginalized sections of the population**.

Key recommendations in section of inclusion

- **Health:** Successfully implementing the **Ayushman Bharat programme**, create a focal point for public health at the central level with state counterparts, promote integrative medicine curriculum.
- **Education:** Upgrade the **quality of the school education** system and skills, including the creation of a new innovation ecosystem at the ground level by establishing at least 10,000 **Atal Tinkering Labs** by 2020.
 - Conceptualize an electronic national educational registry for tracking each child's learning outcomes.
- **Housing for all:** Affordable **housing in urban areas** to improve workers' living conditions and ensure equity while creating very large **multiplier effects** in the economy.

Governance

- Governance deals with how the governance structures can be streamlined and processes optimized to achieve better developmental outcomes.

Key recommendations in section of Governance

- Implement the recommendations of the **Second Administrative Reforms Commission**.

Note:

- Set up a new autonomous body, viz., the **Arbitration Council of India** to grade arbitral institutions and accredit arbitrators to make the arbitration process cost effective and speedy, and to preempt the need for court intervention.
- Address the **backlog of pending cases** – shift part of workload out of regular court system.
- Expand the scope of **Swachh Bharat Mission** to cover initiatives for landfills, plastic waste and municipal waste and generating wealth from waste.

Delta Ranking of the Aspirational Districts

NITI Aayog has released the ranking of 111 aspirational districts – DEEP-DIVE 2nd Delta Ranking & Insights from Household Survey.

Aspirational Districts were **ranked on improved performance made by them over the months of June – October 2018**.

- The districts were assessed across **six developmental areas of Health and Nutrition, Education, Agriculture and Water Resources, Financial Inclusion, Skill Development, and Basic Infrastructure**.
- The ranking also factored invalidated data from Household Surveys conducted by NITI Aayog's knowledge partners, namely, TATA Trusts and Bill & Melinda Gates Foundation (IDInsight).
- The Surveys were carried out in all Aspirational Districts during the month of June 2018 covering more than 1,00,000 households.
- The first delta ranking for aspirational districts was released in June 2018.

Ranking of Districts

Most and Least Improved Districts (June-October 2018)			
Rank	District, State	Rank	District, State
1	Virudhunagar, Tamil Nadu	107	Kiphire, Nagaland
2	Nuapada, Odisha	108	Giridih, Jharkhand
3	Siddharthnagar, Uttar Pradesh	109	Chatra, Jharkhand

4	Aurangabad, Bihar	110	Hailakandi, Assam
5	Koraput, Odisha	111	Pakur, Jharkhand

"Fast Movers': Districts which have shown a qualitative jump in their scores between June and October 2018

District, State	June 2018	October 2018
Kupwara, Jammu and Kashmir	108	7
Ranchi, Jharkhand	106	10
Siddharth Nagar, Uttar Pradesh	101	3
Jamui, Bihar	99	9
Fatehpur, Uttar Pradesh	82	25

Most and Least Improved Districts Across Different Themes

Themes	Most Improved District	Least Improved Districts
Education	Virudhunagar, Tamil Nadu	Pakur, Jharkhand
Health and Nutrition	Chitrakoot, Uttar Pradesh	Chatra, Jharkhand
Financial Inclusion	Kupwara, Jammu and Kashmir	Chandel, Manipur
Agriculture and Water Resources	Sitamarhi, Bihar	Giridih, Jharkhand
Basic Infrastructure	Virudhunagar, Tamil Nadu	Pakur, Jharkhand
Skill Development	Raichur, Karnataka	Khammam, Telangana

Significance

- The delta ranking of the Aspirational Districts combines the **innovative use of data with pragmatic administration**, keeping the district at the locus of inclusive development.
- This positioning is expected to **aid the District Magistrates/Collectors** to focus more on these sectors and improve their ranking in the future.

Note:

'Transformation of Aspirational Districts' programme

- The programme was launched in **January 2018**, with the aim of **expeditiously improving the socio-economic status of 117 districts through cooperative and competitive federalism**.
- Driven primarily by the States, this initiative focuses on the strengths of each district and prioritizes the attainable outcomes for immediate improvement.
- The Aspirational Districts programme **aims to rapidly transform districts that have been showing relatively less progress in key social areas**, and have emerged as pockets of under-development, thereby posing a challenge to balanced regional development.
- The broad contours of the programme are:
 - **Convergence** (of Central & State Schemes),
 - **Collaboration** (of Central, State level 'Prabhari' Officers & District Collectors),
 - **Competition among districts** driven by a Mass Movement or a Jan Andolan.

Delta Ranking

- The programme ranks districts based on the monthly improvement achieved through the Champions of Change dashboard (An online Dashboard).

Bogibeel Bridge

Prime Minister inaugurated the **Bogibeel railway-road bridge**, in Assam which is **India's longest railroad bridge (4.94 km)**.

- It spans over the river Brahmaputra connecting **Dibrugarh and Dhemaji districts of Assam**.



- Besides providing rail connectivity, it will link two existing **national highways—NH-37** on the south bank and **NH-52** on the north bank.
- In a comparison of all bridges across water, the Bogibeel comes in at fourth, after the neighbouring **Dhola-Sadiya road bridge** (9.15 km), the **Patna-Hajipur road bridge** (5.75 km), and the **Bandra-Worli Sea Link** (5.6 km).
- It has taken more than three decades to build after it was promised as a part of the Assam Accord in 1985 – an initiative directed towards improving the state's infrastructure.
- It is also India's first fully-welded steel bridge.

Significance of the Bridge

- **Regional connectivity:** The bridge will significantly reduce the journey from Dibrugarh in Assam to the Arunachal Pradesh capital Itanagar. It will benefit tourists, trade goods and those seeking medical treatment.
- **Defence:** The bridge will facilitate quicker movement of troops and equipment to areas near the India-China border.
- **International relations:** With increased intra-North-East connectivity and transnational linkages like trilateral highway connecting Manipur to Thailand, rail connectivity through Bangladesh between mainland India and Tripura etc. opens up unprecedented economic opportunity in the region and end its isolation.

Packaging in Jute Bags Made Mandatory

Recently the Government has mandated the packaging of **100% of foodgrain and 20% of sugar** in jute bags for 2018-19.

- The decision aims to benefit farmers and workers in the Eastern and Northeastern parts of the country like West Bengal, Bihar, Odisha, Assam, Andhra Pradesh, Meghalaya and Tripura.
- The jute industry is predominantly dependent on the government sector, which purchases jute bags worth more than Rs 6,500 crore every year for packing food grains.
- Initially 10% of the orders of jute bags for packing foodgrain would be placed through reverse auction on the GeM (Government e-Marketplace) portal that would facilitate price discovery.

Note:

- The order follows the **Jute Packaging Materials (Compulsory Use in Packing Commodities) Act (JPM), 1987** to protect the jute sector from the plastic packaging segment.
- The Act mandates compulsory use of sacks in certain areas to bring buoyancy to the raw jute market.
- Initially there was reservation for sugar, cement, fertiliser and foodgrain packaging. However, certain sectors have been taken out of the ambit due to market demand for alternative synthetic packaging as there was seepage of materials through jute sacks.

Jute

- Known as the '**golden fibre**' jute is one of the longest and most used natural fibre for various textile applications.
- It thrives in **tropical lowland areas with humidity of 60% to 90%**. Jute is a rain-fed crop with little need for fertilizer or pesticides.
- **Retting of Jute** is a process in which the tied bundles of jute stalks are immersed in water by which fibres get loosened and separated from the woody stalk.
- **World's leading jute producing** countries are **India, Bangladesh, China and Thailand**. **India** is the **world's largest producer** of raw jute and jute goods, contributing to over 50% and 40% respectively of global production.
- The cultivation of jute in India is mainly confined to the eastern region of the country. The jute crop is grown in seven states - West Bengal, Assam, Orissa, Bihar, Uttar Pradesh, Tripura and Meghalaya. **West Bengal** alone accounts for over **50% of the total raw jute production**.
- To promote and popularize jute diversification work, **National Jute Board**, Ministry of Textiles, acts as the **apex body for promotion of the products** in India and abroad.
- The **first jute mill** was established at **Rishra (Bengal - now in West Bengal)**, on the river **Hooghly** near **Calcutta (now Kolkata)** in the year **1855**, by Mr. George Aclend. In 1959, the first power driven weaving factory was set up.

Potential of Jute Industry

- Jute Geotextile is (a variety of jute available in woven and non-woven fabrics) used in **erosion control**, separation, **filtration and drainage in civil engineering work**, and agricultural uses. It also has application in rural road pavement construction and agro plant mulching.
- **Diversification of jute products** has opened up large opportunity for **employment generation**. Examples of diversified jute products include fancy jute bags, soft luggage, footwear, door panels, sarees, wide range of furnishing, gift items, table lamps, floor decor, wall decor and many more items.
- Jute bags have porosity, easily withstand the high temperature and are much stronger than poly sacks. Jute bags can be recycled and reused and can be easily repaired.

Government Initiatives for Promoting Jute Industry

- **Jute Corporation of India (JCI)** procures raw jute at **Minimum Support Price (MSP)**, fixed on the basis of recommendation of the commission for Agricultural Cost and Prices (CACP), from jute growers to safeguard their interest.
- **Incentive Scheme for Acquisition of Plants and Machinery (ISAPM)**: Launched in 2013, it aims to facilitate modernization in existing and new jute mills and up-gradation of technology in existing jute mills.
- **Jute-ICARE (Jute: Improved Cultivation and Advanced Retting Exercise)**: This pilot project launched in 2015 is aimed at addressing the difficulties faced by the jute cultivators by providing them certified seeds at subsidized rates, and by popularizing several newly developed retting technologies under water limiting conditions.
- **The National Jute Board** implements various schemes for market development, workers' welfare and promotion of diversification and exports.
- In order to boost demand in the jute sector, the Government has also imposed **anti-dumping duty on import of jute goods** from **Bangladesh and Nepal**.



International Relations

Highlights

- President's Visit To Myanmar (16)
- Maldives President's Visit to India (17)
- Indian Firm Takes Over Chabahar Port Operations (18)
- Ceasefire in Yemen (19)
- US to Pull Out Troops from Syria and Afghanistan (20)

President's Visit To Myanmar

- Recently President of India visited Myanmar.
- It is the first visit by the President to Myanmar since assuming office.

Highlights of the visit

- A number of Memorandums of Understanding were signed between both the sides in the areas of judicial and education cooperation.
- There was also the announcement of visa on arrival facility for Indian tourists by the Myanmar government.
- Both sides agreed to sign at the earliest the MoU for Cooperation on Combating Timber-Trafficking and Conservation of Tigers and Other Wildlife.

India-Myanmar Relations

- **Geopolitical:** India shares a long land border of over 1600 Km with Myanmar as well as a maritime boundary in the Bay of Bengal.
- Four north-eastern states viz. Arunachal Pradesh, Nagaland, Manipur and Mizoram share boundary with Myanmar.
- **Commercial Cooperation:** A bilateral Trade Agreement was signed in 1970. Bilateral trade has been growing steadily to reach US\$2.1 billion (2016-17), of which Indian exports amounted to US\$1.1 billion and Indian imports to US\$1 billion.
- India is the fifth largest trading partner of Myanmar but trade remains below potential.
- **Cultural Relations:** India and Myanmar share close cultural ties given India's Buddhist heritage. Building on this shared heritage India has undertaken some key initiatives such as Restoration of the Ananda Temple in Bagan and donation of a 16-ft replica of the Sarnath Buddha Statue which has been installed at the premises of Shwedagon pagoda in Yangon.

- The Archaeological Survey of India (ASI) is working to preserve and restore stone inscriptions and temples of King Mindon and King Bagyidaw of Myanmar in Bodh Gaya.

Indian Projects in Myanmar

- **India-Myanmar-Thailand Trilateral Highway**
 - This proposed highway project connects India to Thailand through Myanmar.
- **Kaladan Multimodal Project**
 - It is a multimodal transport project having three different modes viz. shipping, inland waterways and road stretches.
 - The Kaladan Multimodal transit project connects Indian port of Kolkata to Sittwe port in Rakhine state, Myanmar via sea. In Myanmar, it will then link Sittwe seaport to Paletwa. Then from Paletwa, by road, to Mizoram in Northeast India.
 - This project is expected to contribute to the economic development of the North-Eastern States of India. It is also an alternate route to India's North-East bypassing the Siliguri Corridor.
- **Projects in Rakhine State**
 - India had signed a memorandum of understanding (MoU) with Myanmar for improving the socioeconomic condition of the people belonging to Myanmar's Rakhine state under the aegis of Rakhine State Development Programme.
- **Other Projects**
 - India is also working on the Rhi-Tiddim road; supply of bailey bridges; assistance for border area development by financing bridges, roads, schools, and health centers; assistance in higher learning and research, Myanmar-India Entrepreneurship Development Centre etc.

Importance of Myanmar for India

Note:

- India's **Act East Policy** and **Neighbourhood first** policy interacts at Myanmar.
- Myanmar is the member of both **Association of Southeast Asian Nations (ASEAN)**, which is an organization of East Asian nations as well as **Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)** which bridges South and South-East Asia.
- Connectivity projects through Myanmar can help India overcome its **Chicken's neck dilemma (Siliguri Corridor)**.
- Myanmar is also necessary for the development of the North Eastern India.
- Myanmar is a close neighbour and **only ASEAN country to which we are linked by land and sea**.

Maldives President's Visit to India

The President of the Republic of Maldives Ibrahim Mohamed Solih visited India on a state visit from 16-18 December 2018.

- This was the first foreign visit by President of Maldives after assuming office in November 2018.

Outcome of the Visit

- The two countries signed the following Agreements/ MoUs/Joint Declaration of Intent during the visit:
 - Agreement on the facilitation of visa **arrangements**.
 - Memorandum of understanding on **cultural cooperation**.
 - Memorandum of understanding for establishing mutual cooperation to improve the ecosystem for **agribusiness**.
 - Cooperation in the field of **communications technology** and **electronics**.
 - Countries agreed to work together in the areas of health, mutual legal assistance, investment promotion, human resource development, and tourism.
- India announced **financial assistance of US\$ 1.4 billion** in the form of budgetary support, currency swap and concessional lines of credit to fulfill the socio-economic development programmes of the Maldives.
- The Maldives reaffirmed its "**India-First Policy**", and

showed commitment to work together closely with India.

- Both countries agreed on the importance of maintaining **peace and security in the Indian Ocean Region**.
- The two countries reaffirmed their commitment and support for increased cooperation in **combating terrorism**.

India-Maldives Relation



- India and the Maldives share **deep historical, cultural, and economic ties**.
- India was among the first to **recognize the Maldives after its independence in 1965** and to establish diplomatic relations with the country. India established its embassy at Malé in 1972.
- India's bilateral and financial assistance to the Maldives has been reciprocated through an "India first" policy by the Maldives.

Importance of the Maldives for India

- The Maldives presents an important aspect for India's '**Neighbourhood First**' policy.
- **Strategically located in the Indian Ocean**, Maldives archipelago comprising 1200 coral islands lies next to key shipping lanes which ensure uninterrupted energy supplies to countries like China, Japan, and India. More than 97% of India's international trade by volume and 75% by value passes through the region.
- As the pre-eminent South Asian power and a '**net security provider**' in the Indian Ocean region, **India needs to cooperate with the Maldives in the security and defense sectors**.
- India is also a preferred destination for Maldivians for education, medical treatment, recreation, and business.

- **Maldives is also a member of SAARC.** It is important for India to have the Maldives on board to maintain its leadership in the region.
- Due to **China's naval expansion into the Indian Ocean**, Maldives significance has steadily grown and now it is at the heart of international geopolitics.
- There is significant **Indian diaspora in the Maldives**. Innumerable Indians work across the hospitality, education, and health-care sectors of the Maldives' economy.

Indian Firm Takes Over Chabahar Port Operations

Indian firm India Ports Global Limited took over the operations of the Shaheed Beheshti Port at Chabahar on the southeastern coast of Iran.

- The Chabahar port has been **jointly developed by India, Iran, and Afghanistan**.
- In the first meeting for implementation of the trilateral Chabahar Agreement, the three countries agreed to finalize the Protocol to harmonize transit, roads, customs, and consular matters.
- It was agreed to allow cargo movement at Chabahar using **TIR (Transports Internationaux Routiers)** Convention provisions.

Significance



- It will **boost India's regional connectivity** and trade connectivity plan. Chabahar port opens up a permanent alternative route for trade with Afghanistan and Central Asia by bypassing the route through Pakistan.
- It gives a **boost to India's bilateral ties with Iran** which is a major oil supplier for India.
- It will **facilitate India's role in Afghanistan's** development through infrastructure and education projects.
- It will allow **Afghanistan to have a commercial fleet** under the Afghan flag sailing from Chabahar.
- The port is also a **key link in the International North South Transport Corridor (INSTC)**, a multi-modal network of ships, rail and road routes to move freight between India and Russia via Iran.
- Chabahar Port is a **key element in India's Indo-Pacific strategy** that also includes Eurasia's connect with the Indian Ocean Region.
- Central Asian countries like– Uzbekistan and Kazakhstan– also view Chabahar Port as their gateway to the Indian Ocean Region.

Challenges

- **The US Sanctions:** As of now, Chabahar port has received a waiver from the U.S. sanctions on Iran, but these concessions could be withdrawn at any time, given the constant upheaval in the administration.
- **Security Concern:** The possibility of the withdrawal of U.S. troops from Afghanistan will add to security concerns in the region and will impact the Chabahar route as well.
- **Gwadar Port, Pakistan:** The reconciliation process of the US and Russia with the Afghan Taliban might lead to greater engagements with Pakistan in the region. The Chabahar port is seen as a rival warm water port to China financed Gwadar port in Pakistan.
- **Supporting Connectivity Projects:** To tap the full potential of Chabahar Port for benefit of Afghanistan, India should pace up the development of a rail line from Chabahar to Zahedan at Iran-Afghanistan Border which will be further connected to Zaranj-Delaram Highway in Afghanistan.

Note:

TIR Convention

- The Customs Convention on International Transport of Goods under cover of **TIR Carnets, 1975 (TIR Convention)**, is an international transit system under the auspices of the United Nations Economic Commission for Europe (UNECE).
- TIR Convention facilitates the **seamless movement of goods within and amongst the Parties to the Convention**.
- At present, there are 76 parties to the Convention, including the European Union.
- **India became the 71st country** to ratify the United Nations TIR (Transports Internationaux Routiers) Convention in 2017.

International North-South Transport Corridor (INSTC)

- International North-South Transport Corridor (INSTC), is multi-modal transportation established in September 2000 in St. Petersburg, by Iran, Russia and India for the purpose of promoting transportation cooperation among the Member States.
- This corridor connects India Ocean and the Persian Gulf to the Caspian Sea via Iran and then is connected to St. Petersburg and North Europe via the Russian Federation.
- The INSTC was expanded to include eleven new members, namely: Azerbaijan, Armenia, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkey, Ukraine, Belarus, Oman, Syria, Bulgaria (Observer).

Ceasefire in Yemen

The warring parties in Yemen, the Houthi rebels and the Saudi Arabia-backed forces loyal to President of Yemen, agreed to a United Nations-mediated ceasefire agreement.



- The agreement was reached in UN-mediated talks held in Stockholm in December 2018 and signed in the city of Hodeidah in Yemen.
- The Saudi-led coalition had blockaded the port, the main conduit for humanitarian aid to enter Yemen, for months, and the fighters, mostly UAE soldiers, were battling the rebels.

Hodeidah Ceasefire Agreement

- According to the UN, a ceasefire by the parties came into effect in the city and the three ports of Hodeidah, Ras Isa and Saleef from midnight December 17, 2018.
- Under the agreement, the Houthis will withdraw from the ports and from Hodeidah city and a UN-chaired committee including both sides will oversee the withdrawal of forces.
- The Yemeni ports will fall under the control of "local forces", who would then send the ports' revenues to the country's Central Bank.

What led to talks?

- **UN Efforts:** The UN has been pushing for an agreement for long.
- **Jamal Khashoggi Murder:** Saudi Arabia which is a major party in the crisis came under increased global pressure to stop fighting in Yemen after the murder of journalist Jamal Khashoggi inside its consulate in Istanbul.
- **Humanitarian Crisis in Yemen:** The spotlight on Yemen and its deteriorating humanitarian situation led to a severe global outcry. The impact was so high that, the U.S., which supports Saudi Arabia in the war, cut down its involvement by ending refueling of coalition aircraft.

War in Yemen

- Since 2014, Yemen is facing a multi-sided conflict involving local, regional, and international actors.
- The Houthis are a group of Zaidi Shia Muslims who ruled a kingdom there for nearly 1,000 years. They used widespread anger against President Hadi's decision to postpone long-awaited elections and his stalled negotiations over a new constitution.
- They marched from their stronghold of Saada province to the capital Sanaa and surrounded the presidential palace, placing Hadi under house arrest.

Note:

- A military coalition led by Saudi Arabia intervened in Yemen on March 26, 2015, at Hadi's request, after the Houthis continued to sweep the south and threatened to conquer the last government stronghold of Aden.

Humanitarian Crisis in Yemen

- According to WHO, since the Saudi intervention in 2015, at least 10,000 people have been killed in Yemen.
- The widespread damage caused to infrastructure by the coalition airstrikes and lack of supplies of food and medicines due to the blockade has pushed Yemen into a humanitarian catastrophe.
- About 12 million people are at the risk of starvation in Yemen. The country is also facing a massive cholera outbreak. According to UNICEF, a child dies every 10 minutes in Yemen from preventable causes.

Operation Raahat (2015)

India launched a rescue operation in Yemen to ensure safe passage to Indian citizens and other foreign nationals who were stuck in Yemen after Saudi Led coalition intervened.

Way Forward

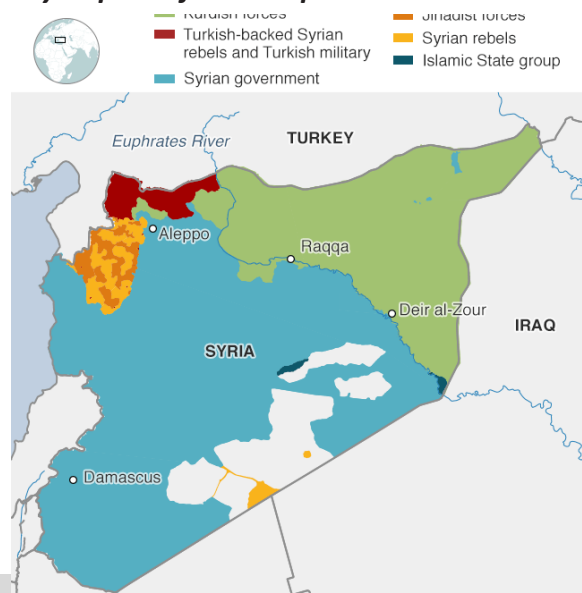
- The war has reached a stalemate long ago. The Houthis are facing the loss of territory in recent months, while the Saudi coalition is facing growing international pressure.
- A solution to the conflict can be found only if the rebels and the government make some political concessions.
- The current deal, if implemented on the ground, will represent a breakthrough because the port is the gateway for the bulk of humanitarian aid coming into the country.

US to Pull Out Troops from Syria and Afghanistan

United States has decided to withdraw over 2,000 US troops from Syria after it has declared victory over the Islamic State.

- US has also decided to reduce by half the US forces in Afghanistan.
- These decisions mark the end of a prolonged phase of American military interventions in the Middle East and South Asia.

Likely Impact of US Troops Withdrawal



- Allies of US like the UK, Germany, and France have expressed dismay over the decision as they also have troops stationed in Syria. The Syrian Democratic Forces (SDF) warned of a military vacuum that would leave the alliance trapped between "hostile parties".
- Withdrawal of troops can allow regional actors like Iran to increase their footprints in Syria.
- It may lead to demands for US troops withdrawal from Iraq also.
- An imminent US withdrawal might lead to an open confrontation between Turkish and Kurdish forces.
- The withdrawal of US may lead to the resurgence of forces like Islamic State in Syria and of Taliban in Afghanistan.

Impact on India

- India must be concerned about the changes in US stance in the middle east and Afghanistan as it will **impact its interest in the region and in the neighborhood**.
- India was impacted by the **rise of the Islamic state** after the turmoil in Syria.
- The **extremist group IS (Islamic State)**, **extended its reach to South Asia** – home to the largest Muslim population in the world – is of concern to India, which has significant stakes in the peace and stability in South Asia.
- The threat was compounded by the fact that **IS started attracting Indian youth**.
- The resurgence of Taliban will severely impact **India's position and stakes in Afghanistan, embolden Pakistan while destabilizing the region**.

Syrian Crisis

- Syria has been in a **state of civil war since the 2011** uprising known as the “Arab Spring.”
- The Syrian government, led by President Bashar al-Assad, responded to the protests by killing hundreds of demonstrators and imprisoning many more.
- In July 2011, defectors from the **military announced the formation of the Free Syrian Army**, a rebel group aiming to overthrow the government, and Syria began to slide into civil war.
- **International Involvement:** The civil war has spilled beyond the borders of Syria. It has triggered sectarian tensions (**Shia-Kurds-Sunni**), geopolitical rivalries (US-Russia; **Iran-Saudi Arabia-Israel**), and the global threat of **Islamic extremism (Islamic State)**.

India's Position on Syrian Crisis

- India's position in Syria and the middle east is influenced by its stakes in **energy security and diaspora**.
- India's support for the President Bashar-al-Assad regime in Syria is driven by two factors. The first is its **fears of instability and the rise of Islamic fundamentalism**.
- The second is its commitment to **non-interventionism**, a position shared by members of the BRICS.
- In addition to these factors, Assad's Ba'ath Party has continuously **supported India's stance on the Kashmir issue**.
- In line with this, India supports an all-inclusive Syrian-led process to chart out the future of Syria, its political structure and leadership.



Science and Technology

Highlights

- National Supercomputing Mission (22)
- Information Fusion Center of Indian Navy (23)
- GSAT-7A Launched (24)
- India's First Military Flight using Blended Bio-Jet Fuel (24)
- Mission Gaganyaan (25)
- Small Satellite Launch Vehicle (26)
- Agni-IV Missile Successfully Test-Fired (27)
- Brightest Object in the Universe (27)
- Farout (27)

National Supercomputing Mission

French technology firm Atos will build a network of 70 supercomputers across India under the **National Supercomputing Mission**.

- The supercomputers will be **manufactured and designed in India**, and will boost India's supercomputing capabilities. However, in terms of the speed, they will **greatly lag those built by China**, the world's largest supercomputer powerhouse.
- The **first three supercomputers** will be set up in **IIT BHU, IIT Kharagpur and IIITM Pune**. While IIT BHU will get a one Petaflop supercomputer, the other two institutes will have 650 Teraflops each.

National Supercomputing Mission

- The National Supercomputing Mission was **announced in March 2015**, with an aim to connect **national academic and R&D institutions with a grid of more than 70 high-performance computing facilities** at an estimated cost of **₹4,500 crore** over the period of **seven years**.
- It supports the government's vision of '**Digital India**' and '**Make in India**' initiatives.
- The mission will be implemented by the **Department of Science and Technology (Ministry of Science and Technology)** and **Ministry of Electronics and Information Technology (MeitY)**, through the **Centre for Development of Advanced Computing (C-DAC)** and **Indian Institute of Science (IISc), Bengaluru**.
- These supercomputers will also be networked on the National Supercomputing grid over the National Knowledge Network (NKN). The NKN connects academic institutions and R&D labs over a high speed network.

- Under NSM, the long-term plan is to **build a strong base of 20,000 skilled persons** over the next five years who will be equipped to handle the complexities of supercomputers.

- **PARAM Shavak** is one such machine that has been deployed to provide training.

Advantages

- These supercomputers will **meet the increasing computing demand of the scientific and academic community** in the country, international technology trends and roadmaps of leading countries in the area, strategic importance and emergence of supercomputing as a benchmark for Scientific & Technological advancements.
- These machines will be part of the **National Supercomputing grid over the National Knowledge Network (NKN)**, which will have wide-scale applications in the fields of **climate modelling, weather prediction, aerospace engineering, computational biology, molecular dynamics, atomic energy simulations, national security and defence applications, seismic analysis, disaster prediction and management, computational chemistry, big data analytics, finance and more**.

Supercomputers in India

- India's supercomputer program was started in **late 1980s** after **Cray supercomputers** could not be imported into India due to an **arms embargo imposed on India**, as it was a dual-use technology and could be used for developing nuclear weapons.
- This led to setting up the **Centre for Development of Advanced Computing (C-DAC)** in **March 1988** with the clear mandate to develop an indigenous supercomputer to meet high-speed computational needs.

- **PARAM 8000**, considered to be India's first supercomputer, was **indigenously built in 1991** by the Centre for Development of Advanced Computing (C-DAC).
- Presently, **Pratyush, a Cray XC40 system** – an array of computers that can deliver a **peak power of 6.8 petaflops**, installed at the **Indian Institute of Tropical Meteorology (IITM), Pune**, is the fastest supercomputer in India. Launched in January 2018, it is the **fourth fastest High Performance Computer (HPC) dedicated to climate modelling in the world**.

Way Forward

- The biggest challenge for India is **limited funding**. Limited investments and delayed release of funds have slowed things down further.
- While India's stronghold is in the field of software development, it has to depend on imports to procure the hardware components required for building supercomputers.
- But the situation is changing, with India now venturing into design, manufacture and assembly of hardware components. This will not only cut down import costs, it will also ensure that while assembling supercomputers, applications are tailored to address problems that are specific to India.

Information Fusion Center of Indian Navy

The Indian Navy has inaugurated the **Information Fusion Centre (IFC) for the Indian Ocean Region (IOR)**.

- It will serve countries that have **White Shipping Information Exchange**.
- White-shipping refers to commercial shipping information about the movement of cargo ships agreements with India.
- The IFC-IOR is established with the **vision of strengthening maritime security** in the region, by building a **common coherent maritime situation picture** and acting as a **maritime information hub for the region**.
- The IOR apart from **being heavily militarized ocean** also faces threats like **maritime terrorism, piracy, arms-running, human trafficking**.

Information Fusion Centre (IFC)

- The IFC has been established at the Indian Navy's **Information Management and Analysis Centre (IMAC) in Gurugram, Haryana**.

- IFC is the single point center **linking all the coastal radar chains** to generate a **seamless real-time picture** of the nearly 7,500-km coastline.
- All countries that have signed white shipping information exchange agreements (About 21 countries) with India can now position **International liaison officers (ILOs) at the IFC**.
- The IFC-IOR is a separate platform and all **members of the Indian Ocean Naval Symposium are expected to be part of it**. The IONS, launched in 2008, seeks to increase maritime cooperation in IOR.

Significance

- To **improve maritime domain awareness** in the Indian Ocean.
- It will strengthen the **mutual collaboration and understanding of the threats prevalent in the region**.

Trans-Regional Maritime Network (T-RMN)

- Recently, India has signed the Trans Regional Maritime Network (T-RMN) agreement.
- The multilateral agreement **comprises of 30 countries and is steered by Italy**.
- This will facilitate information exchange on the movement of commercial traffic on the high seas.
- Under the T-RMN, information is available mainly through the **Automatic Identification System (AIS)**.
- The AIS is used to identify passenger and commercial ships in international waters.
- Such multilateral agreements help Indian Navy monitor whole Indian Ocean.

Information Management and Analysis Centre (IMAC)

The Information Management and Analysis Centre (IMAC) is located in **Gurugram**.

It is the main center of the Indian Navy for **coastal surveillance and monitoring**.

IMAC is the **nodal center of the National Command Control Communications and Intelligence Network (NC3I Network)**.

IMAC is a joint initiative of Indian Navy, Coast Guard and Bharat Electronics Ltd. and **functions under the National Security Adviser (NSA)**.

National Command Control Communication and Intelligence Network (NC3IN)

The Indian Navy has established the NC3IN linking 51 stations, including 20 of the Navy and 31 of the Coast Guard, to generate a seamless real-time picture of the nearly 7,500-km long coastline.

GSAT-7A Launched

Indian Space and Research Organization (ISRO) has recently launched communication satellite GSAT-7A onboard the Geosynchronous Satellite Launch Vehicle F-11 (GSLV F-11).

- GSLV F-11 is the seventh flight of GSLV Mk-II and is equipped with indigenously developed cryogenic upper stage engine.
- The satellite is nicknamed as 'angry bird' as it will enhance Indian Air Force (IAF) capabilities.
- In September 2013, ISRO launched **GSAT-7 (Rukmini)**, a communication satellite **exclusively for Navy** to monitor Indian Ocean Region up to 2,000 nautical miles and provide real-time inputs to Indian warships, submarines, and maritime aircraft.

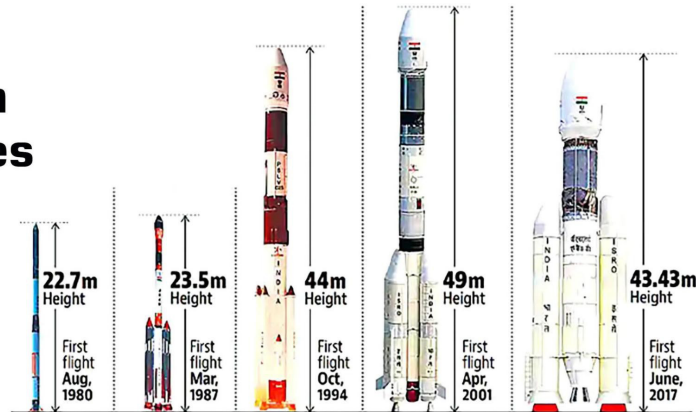
Significance

- Boost to the **strategic communication** and networking capabilities of the IAF.
- GSAT-7A will enable superior **real-time aircraft-to-aircraft communication** and between aircraft and base station.
- It will **boost the IAF's network-centric warfare capabilities** by interlinking all ground-based radars.

GSAT-7A

- Weight: 2250 Kg
- Orbit: Super Synchronous Orbit (Orbit beyond Geosynchronous Orbit)
- Mission Life: 8 years
- GSAT-7A is the 35th communication satellite built by ISRO.
- GSAT-7A is an advanced communication satellite with a Gregorian Antenna.
- The satellite will operate in the Ku band (This frequency range is often used for satellite communications).

India's Launch Vehicles



Vehicle	SLV-3	ASLV	PSLV-XL	GSLV-MK II	GSLV-MK iii
Lift-off weight	17t	39t	320t	414t	640t
Payload mass	40kg	150kg	1,860kg	2,200kg	4,000kg
Propulsion	All solid	All solid	Solid & liquid	Solid, liquid and cryogenic	Solid, liquid and cryogenic
Orbit	Low Earth Orbit (2,000km)	Low Earth Orbit (2,000km)	Sun Synchronous Polar Orbit (475km)	Geosynchronous Transfer Orbit (35,786km)	Geosynchronous Transfer Orbit (35,786km)

India's First Military Flight using Blended Bio-Jet Fuel

- For the first time, an **An-32 transport aircraft of the Indian Air Force (IAF)** flew with 10% bio-jet blended ATF (aviation turbine fuel) made from Jatropa oil.
- This has the **dual benefit** of **reducing the carbon footprint** as well as **usage of fossil fuels**.
- With this, India joins a league of select nations to have developed, tested and certified the single step **Hydroprocessed Renewable Jet (HRJ) process to convert non-edible oil into biofuel for use on military aircraft**.
- A biofuel is a fuel **produced from living matter** that includes plant waste and animal fat.
- The project is a combined effort of **Indian Air Force (IAF), Defence Research and Development Organisation (DRDO), Directorate General Aeronautical Quality Assurance (DGAQA) and Council of Scientific and Industrial Research (CSIR-Indian Institute of Petroleum)**.

Note:

Biofuels

- Biomass resources are the biodegradable fraction of products, wastes and residues from agriculture, forestry and related industries as well as the biodegradable fraction of industrial and municipal wastes.

Biofuels		
Generation	Characteristics	Remarks
First	Produced from food crops like maize, corn, sugar cane, rapeseed, palm, and soybean into ethanol and biodiesel, using a similar process to that used in beer and wine-making.	Impose significant costs on food security by demanding a share of staple crops, traditionally used solely for food and feed. Resulting in a conflict between fuel and food security.
Second	Produced from non-food crops and organic agricultural waste, which contain cellulose.	Grasses like switchgrass, non-edible oil seeds like Jatropa, castor seed can be transformed into biofuels.
Third	Derived from algae. Also known as green hydrocarbons.	The list of fuels that can be derived from algae includes: Biodiesel, Ethanol, and Jet-fuel.
Fourth	Produce sustainable energy as well as capture and store CO ₂ by converting biomass materials, which have absorbed CO ₂ while growing, into fuel.	At all stages of production, the CO ₂ is captured using various processes. Rather than simply being carbon neutral, the fourth generation biofuel production is carbon negative, since it 'locks' away more carbon than it produces and also lowers CO ₂ emissions by substituting fossil fuels.

Key Advantages of Biofuel

- Renewable Energy source.
- Non-toxic & Biodegradable.
- Contains no sulphur that causes acid rain.
- Environment friendly-less emissions.
- Has rural employment potential.

Mission Gaganyaan

- The Union Cabinet approved the **indigenous manned space mission called Gaganyaan** under which a **three-member crew** will be sent to space.
- The **testing phase** of the mission is expected to begin from **December 2020** and the mission will be **undertaken in 2022**.
- Only US, Russia, and China have sent a manned mission to the outer space until now.
- A Memorandum of Understanding was signed between ISRO and the Federal Space Agency of Russia 'ROSCOSMOS' on joint activities in the field of the human spaceflight programme during **Russian President Vladimir Putin's visit to New Delhi in October 2018**.

The Mission

- Three flights will be sent in orbit. Of the three, there will be two unmanned flights and one human spaceflight.
- The human space flight programme, called the Orbital Module will have three Indian astronauts.
- It will circle Earth at a low-earth-orbit at an altitude of 300-400 km from earth for 5-7 days.
- The payload will consist of:
 - **Crew module** – spacecraft carrying human beings.
 - **Service module** – powered by two liquid propellant engines.
- It will be equipped with emergency escape and emergency mission abort.
- GSLV Mk III, also called the LVM-3 (Launch Vehicle Mark-3) the three-stage heavy lift launch vehicle, will be used to launch Gaganyaan as it has the necessary payload capability.
- The mission is expected to cost around Rs 10,000 crore.

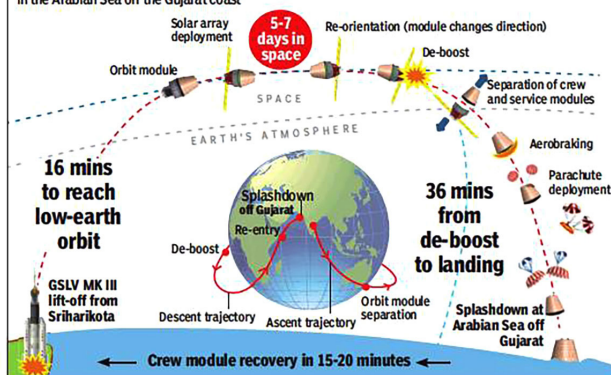
Impact

- Inspire new generation to take to opt for research as career.
- India could play a vital role in global governance of outer space, with Gaganyaan's success.

Note:

MANNED MISSION

An advanced GSLV Mk III will lift off with a crew-service module (orbital module) carrying three Gaganyaan astronauts from Sriharikota. Module will reach space within 16 minutes of launch where crew will hold experiments. During the return journey, orbital module will reorient itself. Crew and service modules will get separated at 120 km and both will fall on Earth. Crew module will make a splashdown in the Arabian Sea off the Gujarat coast.



Timeline

- **2004:** The ISRO Policy Planning Committee made recommendation for a manned space mission
 - **2006:** Preliminary studies of Gaganyaan started under the generic name Orbital Vehicle.
 - **2008:** An initial design of a fully autonomous vehicle to carry two astronauts was finalised.
 - **2009:** A committee was formed to analyse the feasibility of the programme and funding was sanctioned.
 - **2014:** Successful testing of experimental flight of GSLV MK-III was carried out.
 - **2017:** First flight of GSLV MK-III was carried out. GSLV MK-III placed the country's heaviest satellite till date, GSAT-19, into a precise orbit. With it, India became a nation having its own indigenous cryogenic engine technology.
 - **August 15, 2018:** Prime Minister promised manned mission before 2022.
- The mission would create 15,000 new employment opportunities, 13,000 of them in private industry.

Challenges

- India does not even have the facilities to train astronauts.
- India is yet to perfect foolproof launch vehicle technology, the basic requirement for a manned space mission.
- The Polar Satellite launch vehicle and the Geosynchronous Launch vehicle, the two Indian spacecraft deployed to launch satellites and modules into space, are yet to be man-rated. (*Man-rating is the term used to measure the safety and integrity of launch vehicles with zero failure.*)

- ISRO has not been able to put in place India's own Global Positioning System in spite of completing the NavIC due to dysfunctional atomic clocks in the satellites, rendering the fleet a dud.
- While the launch vehicle, crew module, re-entry technology, crew escape system are in place, monitoring and tracking systems, Environmental Control & Life Support System (ELCSS), space suit and crew support systems are still in the developmental phase.
- The launchpad at the Sriharikota spaceport, the Satish Dhawan Space Centre, will have to be enhanced for the human mission.

Way Forward

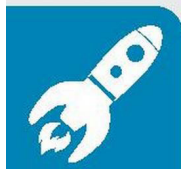
- In terms of space technology, a manned space programme is the obvious next step for India.
- India cannot afford not to develop the technological capacity for manned space flight because that will represent a major drawback in Indian space capabilities.
- Even if the direct benefits of such advancement may not be as great in the short-term, this is a necessary longer-term investment.

Small Satellite Launch Vehicle

Indian Space Research Organisation (ISRO) has completed the design for the **Small Satellite Launch Vehicle (SSLV)**.

- SSLV or the 'baby rocket' will provide on-demand access to space.

Small Satellite Launch Vehicle (SSLV)



Height:	34 metres
Diameter:	2 metres
Lift-off mass:	120 tonnes
Capability:	500 kg payload to LEO
Inaugural flight:	Expected in mid-2019

- It will be used exclusively for small satellites such as **nanosats** and **cubesats**.
- The payload capacity of the SSLV will be 500-700 kilograms in the Lower Earth Orbit (LEO), less than one-third the weight the PLSV can carry.
- It has **three stage solid propulsion system**, and like the PSLV and GSLV, can accommodate multiple satellites, albeit smaller ones. Currently, small satellites are being piggybacked on the bigger ones launched using the Polar Satellite Launch Vehicles (PSLV) and the Geosynchronous Launch Vehicle (GSLV).

- Unlike the PSLV and GSLV, the SSLV can be assembled **both vertically and horizontally**.

Requirement

- The decision of the US to **deregulate small and micro satellites** has given a fillip to the launch service markets.
- The small satellite industry has witnessed a manifold spike in the last few years and with **latest innovations in nanotechnology**, the size of the satellites is expected to further decrease in the future.
- With the huge number of small satellites outpacing the available launchers, many small satellites have to remain grounded as they do not find a launcher due to large queue and waiting time.
- A dedicated launcher for small satellites, not only would cost reduce drastically but also there will be more opportunities to focus on primary research and delineate big satellite launch from small satellite launch.

Agni-IV Missile Successfully Test-Fired

- India successfully test-fired its nuclear-capable long-range **ballistic missile Agni-IV, with a strike range of 4,000 km**.
- The **surface-to-surface missile** was flight tested from Dr Abdul Kalam Island, earlier known as **Wheeler Island**.
- It is a **two-stage solid-propelled missile**, about 20 metres tall and weighs 17 tonnes.
- It is equipped with modern and advanced **ring laser gyro-based Inertial Navigation system (RINS)**.
- The missile is supported by highly reliable redundant **micro navigation system (MINGS)** to give better accuracy.
- Ballistic missiles like **Agni-I, II and III and Prithvi have already been included in the arsenal of the armed forces**.



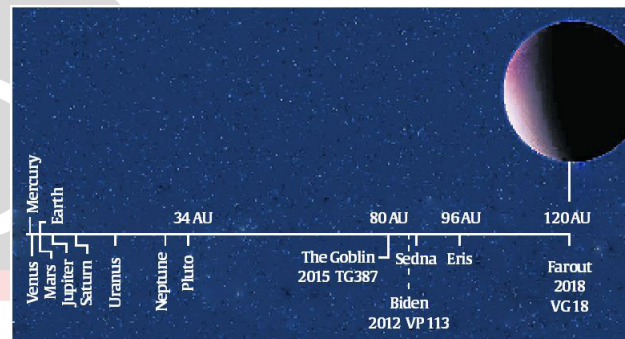
Brightest Object in the Universe

- Astronomers using the Very Long Baseline Array (VLBA) system of 10 radio telescopes discovered the brightest object in the Universe named as **Quasar P352-15**.
- A Quasar is the brightest object in the Universe. It exists at the center of galaxies and draw energy from supermassive black holes.

Impact

- This finding could help experts studying the early stages of the universe to understand what happened during the transition from the Big Bang.

Farout



- This object is most distant object in our universe and nicknamed as **"Farout"** and **provisionally titled 2018 VG18**.
- Farout is also the first known **Solar System object** that has been detected at a distance that is **more than 100 times farther** than Earth is from the Sun.
- Farout was discovered as part of a search for extremely distant Solar System objects, including the suspected Planet X, which is sometimes also called Planet 9.

Environment and Ecology

Highlights

- Conference of the Parties (COP 24) (28)
- Coastal Regulation Zone (CRZ) Notification, 2018 (29)
- Japan to Resume Commercial Whaling (30)
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- Indonesia Tsunami (32)
- Black-necked Crane (33)
- Rampant Killing of Mongoose (33)
- Asiatic Lion Conservation Project (33)
- Decrease in Population of River Dolphins (34)
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- District Mineral Fund (35)

Conference of the Parties (COP 24)

Recently, 24th meeting of the **Conference of the Parties (COP24)** to the United Nations Framework Convention on Climate Change (UNFCCC) concluded in **Katowice, Poland**.

- The aim of the conference was to **finalize a rulebook for Paris agreement 2015**. Paris climate pact will come into effect in 2020 and replace the existing Kyoto Protocol.
- Paris Climate Pact has voluntary emission reduction targets called as “Nationally Determined Contributions” (NDCs) — of individual nations. The rulebook will ensure that the signatories of the pact are held to standards.

Outcome of Summit

- The Katowice conference has **finalized a rulebook for implementation of the Paris Agreement**, which was unanimously adopted by all member countries.
- The guidelines set out **how countries will provide information about their Nationally Determined Contributions**.
- States are required to provide detailed information on the type of actions they have taken, to tackle climate change.
- **The rulebook has addressed some concerns about the opaqueness of climate financing**. Now, Developed Nations had to provide hard data on the sources of future financial flows.
- The rulebook is a dynamic document, meaning new rules can be added, or existing rules amended.

Issues in Conference

- **Disagreement on IPCC Report:** The **1.5°C Report**, of IPCC was not acknowledged as an evidence-based cause for alarm by the U.S., Saudi Arabia, and Russia.
- **Issue of Equity:** Provisions did not reflect the principles of common but differentiated responsibilities.
- **Market Mechanism:** The conference could not reach a consensus on voluntary market mechanisms.
 - A carbon market allows countries, or industries, to earn carbon credits for the emission reductions they make in excess of what is required of them. These carbon credits can be traded to the highest bidder in exchange for money. The buyers of carbon credits can show the emission reductions as their own and use them to meet their own reduction targets.
 - Developing countries like China, India, and Brazil have accumulated huge amounts of unused carbon credits. These countries argued that their unused carbon credits should be considered valid in the new market mechanism that was being created, which was opposed by the developed countries.
 - Developed countries questioned the authenticity of the unused carbon credits, pointing to weak verification mechanisms of the Kyoto Protocol that allowed dubious projects to claim carbon credits.
 - **The discussion over carbon markets is deferred to the next year.**

India's Stand at the Conference

- India **reaffirmed its commitment to meeting the goals under the 2015 Paris Agreement** while advocating climate justice.

- "Climate Justice" means solutions to the climate change problem that promote human rights, equity, labor rights, and environmental justice globally and locally.
- India **expressed strong reservation over the lack of equity in the global stock-take.**
- It sought a **robust transparency regime for countries to disclose their emissions.**

India's INDC

- **Sustainable Lifestyles** – To put forward and further propagate a healthy and sustainable way of living based on traditions and values of conservation and moderation.
- **Cleaner Economic Development**
- To **reduce the emissions intensity of its GDP by 33% to 35% by 2030 from 2005 level.**
- **Increasing the Share of Non-Fossil Fuel Based Electricity**
- **Enhancing Carbon Sink (Forests)** – To create an **additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent** through additional forest and **tree cover by 2030.**
- **Adaptation** – To better adapt to climate change by enhancing investments in development programmes in sectors vulnerable to climate change, particularly agriculture, water resources, Himalayan region, coastal regions, health, and disaster management.
- **Mobilizing Finance** – To mobilize domestic and new & additional funds from developed countries to implement the above mentioned mitigation and adaptation actions.
- **Technology Transfer and Capacity Building** – To build capacities, create a domestic framework and international architecture for quick diffusion of cutting-edge climate technology in India and for joint collaborative R&D for such future technologies.

Coastal Regulation Zone (CRZ) Notification, 2018

The Union Cabinet has approved the Coastal Regulation Zone (CRZ) Notification, 2018 which was last reviewed and issued in 2011.

- CRZ Notification 2018 is based on the recommendations of **Shailesh Nayak committee.**

What Areas are Designated as CRZs?

- Coastal stretches of seas, bays, estuaries, creeks, rivers, and backwaters were declared as CRZs under coastal zone regulation notification in 1991.
- The land area between HTL and Low Tide Line (LTL).

Note:

- **High Tide Line (HTL):** HTL means the line on the land up to which the highest water line reaches during the spring tide.
- **Low Tide Line (LTL):** Similarly, LTL means the line on the land up to which the lowest water line reaches during the spring tide.

Classification

- CRZs have been classified into 4 zones for the purpose of regulation:
 - **CRZ-I:** includes **ecologically sensitive areas**, where no construction is allowed except activities for atomic power plants, defense.
 - **CRZ-II:** includes designated **urban areas** that are substantially built up. Construction activities are allowed on the landward side only.
 - **CRZ-III:** includes relatively undisturbed areas, **mainly rural areas**. No new construction of buildings allowed in this zone except repairing of the existing ones. However, constructions of dwelling units in the plot area lying between 200-500 m of the high tide line is allowed.
 - **CRZ-IV:** includes the water area covered between Low Tide Line and 12 nautical miles seaward. Except for fishing and related activities, all actions impugning on the sea and tidal water will be regulated in this zone.

Salient Features of Notification 2018

- **Floor Space Index Norms Eased:** In CRZ, 2011 Notification, for CRZ-II (Urban) areas, Floor Space Index (FSI) was frozen as per 1991 Development Control Regulation (DCR) levels.
 - In the CRZ, 2018 Notification, it has been decided to de-freeze the same and permits FSI for construction projects to enable redevelopment of these areas to meet the emerging needs.

COAST CUTTER

CLASSIFICATION

CRZ I - Ecologically sensitive areas like sanctuaries, reserve forests, mangroves, coral reefs and turtle-nesting grounds that could be inundated due to rise in sea level

CRZ II - Areas which have already been developed up to the shoreline within municipal limits

CRZ III A - Areas with a population of more than 2,161 per sqkm. Here, 50m from high tide will be no-development zone (NDZ)

CRZ III B - Areas with less population. Here, areas up to 200m from the HTL on the landward side will be earmarked as NDZ

BIGGEST TAKEAWAY FOR TOURISM

• With the freeze on constructions along the coastal zone more or less lifted, the tourism sector will be the biggest beneficiary

• Toilets, changing rooms, drinking water facilities and temporary shacks can be constructed even on beaches

• Existing residential buildings can be converted into homestays without increasing the plinth area

• CRZ will not be a bar for public utilities like roads, even if they pass through mangrove forests

• Introduction of CRZ-III into A and B clauses will address state's main concern of issuing permission to dwelling units as well

Note:

Floor Space Index (FSI) is the ratio between the area of a covered floor (Built up Area) to the area of that plot (land) on which a building stands. It indicates the total amount of area (on all floors) that can be built upon a plot.

- **New Categories for densely populated rural areas:** For CRZ-III (Rural) areas, two separate categories have now been stipulated as below:
 - **CRZ-III A** - These are densely populated rural areas with a **population density of 2161 per square kilometer as per 2011 Census**.
 - Such areas will have a No Development Zone (NDZ) of 50 meters from the High Tide Line as against 200 meters from the High Tide Line stipulated in the CRZ Notification, 2011.
 - **CRZ-III B** - Rural areas with a **population density of below 2161 per square kilometer as per 2011 Census**. Such areas shall continue to have an NDZ of 200 meters from the HTL.
- **Tourism infrastructure in coastal areas:** A minimum distance of 10 m from HTL should be maintained for setting up of facilities such as toilet blocks.
- **Pollution abatement:** In order to address pollution in Coastal areas treatment facilities have been made permissible activities in CRZ-I B area (the area between the Low tide line and High tide line) subject to necessary safeguards.
- **Defense and strategic projects** are exempted from regulations.

- **No development zone (NOZ) of 20 meters for islands** : for Islands close to the mainland coast and for all the backwater islands in the mainland, NOZ of 20 meters has been stipulated.

Benefits

- **Economic Growth:** It will enhance the economic growth in coastal regions in a sustainable manner.
- **It will boost Tourism and Employment**
- **Boost to Conservation Efforts**
- **It will Boost to Housing:** De-freezing FSI Norms will add to creating additional opportunities for affordable housing.

Concerns

- The new amendments legalize the setting up of common effluent treatment plants (CETPs), an impractical technology for cleaning up waste, on the most fragile parts of the coast.

Way Forward

- Decentralized actions have been carried out already: mangroves are being planted, sand dunes and coastal wetlands are being protected, and coastal communities and local governments are collaborating on disaster preparedness.
- Simplification of environmental clearances can be exploited by real estate sector.
- Ensuring rights of fisher community in coastal areas.
- A sustainable approach of development with local participation is the best way to tackle menace of climate change and disasters.

Japan to Resume Commercial Whaling

Recently Japan announced its **withdrawal from the International Whaling Commission (IWC)** conservation body and it will **resume commercial whale hunting** in its territorial waters and exclusive economic zones from July 2019.

- The **IWC, established in 1946 to conserve and manage the world's whale** and cetacean population, introduced a **prohibition on commercial whaling in 1986**.
- Earlier Japan tried to convince the IWC to allow it to resume commercial whaling as certain species were sufficient to support renewed hunting but it failed with strong opposition from anti-whaling nations led by Australia, the European Union and the United States.

Note:

- After withdrawal **Japan joins Iceland and Norway** in openly **defying the IWC's ban** on commercial whale hunting.
- Leaving the IWC means Japanese whalers will be able to resume hunting of minke and other whales in Japanese coastal waters currently protected by the IWC.
- Japan will **not be able** to continue the so-called **scientific research hunts in the Antarctic** that has been exceptionally allowed as an IWC member under the **Antarctic Treaty**.
- According to Japan IWC has failed to live up to its initial dual mandate in 1946 to find a balance between preserving whale stocks and allowing the orderly development of the whaling industry.

Whaling in Japan

- Japan has **hunted whales** for centuries, and the meat was a **key source of protein** in the immediate post-World War II years.
- According to Japan whaling is an important part of Japan's traditions and the withdrawal would allow fishermen to pass on country's rich whaling culture onto the next generation.
- Engagement in whaling has been supporting local communities, and thereby developed the life and culture of using whales.
- **Influential lawmakers** in Prime Minister Shinzo Abe's Liberal Democratic Party whose constituencies include **whaling communities have long lobbied for a resumption** of commercial whaling.
- Whale is hunted for oil which is used for various purposes like producing candle wax, margarine and other products, like additives in motor oils, automatic transmission fluids, cosmetics, perfumes, detergents and vitamins.

International Whaling Commission (IWC)

- IWC is an **Inter-governmental Organisation** whose purpose is the conservation of whales and the management of whaling.
- The legal framework of the IWC is the International Convention for the Regulation of Whaling which was established in 1946.
- The commission is the pre-eminent global body responsible for the conservation and management of whales and leads international efforts to tackle the growing range of threats to whales globally, including by-catch, ship strikes, entanglement, noise, and whaling.
- **India** is a member of IWC.

Antarctic Treaty

- The treaty was opened for signature on December 1, 1959, and officially entered into force on June 23, 1961.
- The original signatories were 12 countries: Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, the Soviet Union, the United Kingdom and the United States.
- **India** is also a party to the Antarctic Treaty.
- Some important provisions of the Treaty:
 - Antarctica shall be used for **peaceful purposes** only.
 - **Freedom of scientific investigation** in Antarctica and cooperation toward that end shall continue.
 - Scientific observations and results from Antarctica shall be exchanged and made freely available.
- India is expanding its infrastructure development in Antarctica.

Rat Hole Mining

Despite a ban, rat-hole mining remains a prevalent practice for coal mining in Meghalaya, where a mine has recently collapsed.

- Rat hole mining involves digging of **very small tunnels**, usually only 3-4 feet high, which workers (often children) enter and extract coal.
- The National Green Tribunal (NGT) **banned it in 2014**, on grounds of it being **unscientific and unsafe** for workers. The state (Meghalayan) government has challenged the NGT ban in the Supreme Court.
- According to available government data, Meghalaya has a total coal reserve of 640 million tonnes, most of which is mined **unscientifically by individuals and communities**.
- Since the **coal seam is extremely thin** in Meghalaya, no other method would be economically viable. Removal of rocks from the hilly terrain and putting up pillars inside the mine to prevent collapse would be costlier. In Meghalaya this is the locally developed technique and the most commonly used one.
- The government **does not have a policy** in place to regulate mining and the new mining policy drafted in 2012 has not yet been implemented. Moreover, the NGT found the **2012 policy inadequate** as it does not address rat-hole mining.

Impact of Rat Hole Mining

- The water sources of many rivers, especially in Jaintia Hills district, have **turned acidic**.
- The water also has high concentration of **sulphates, iron and toxic heavy metals, low dissolved oxygen (DO) and high Biological Oxygen Demand (BOD)**, showing its degraded quality.
- The **roadside dumping of coal** is a major source of air, water and soil pollution.
- Off road movement of trucks and other vehicles in the area for coal transportation also adds to the **ecological and environmental damage** of the area.
- The mines branch into networks of horizontal channels, which are at **constant risk of caving in or flooding**.

Indonesia Tsunami

A tsunami killed more than 200 people and injured hundreds on the Indonesian islands of Java and Sumatra following an underwater landslide believed to be caused by the erupting **Anak Krakatau volcano**.

- Anak Krakatau is the island that emerged from the area once occupied by Krakatau, which was destroyed in 1883. It first appeared in 1927 and has been growing ever since.

Tsunami sweeps Indonesia coast



- High seas as a result of the full moon also contributed to the strength of the waves.
- Tsunami warning buoys are positioned to warn about tsunamis originated by earthquakes at underwater tectonic plate boundaries and not for those by volcanoes.
- Indonesia is prone to tsunamis because it lies on the Ring of Fire - the line of frequent earthquakes and volcanic eruptions that virtually circles the entire Pacific rim.

Tsunami

- Tsunami is a Japanese term meaning a harbor wave. It is also commonly known as killer waves.

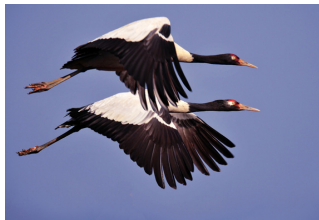


- A Tsunami is not just a single wave but a series of ocean waves called a wave train caused by an underwater earthquake, by a volcanic eruption, landslide, rapid changes in atmospheric pressure, or a meteorite.
- However, tsunamis caused by volcanic activity are less frequent.
- Most tsunamis – about 80 percent – happen within the Pacific Ocean's "Ring of Fire," a geologically active area where tectonic shifts make volcanoes and earthquakes common.
- Tsunamis race across the sea at up to 500 miles (805 kilometers) an hour – about as fast as a jet airplane. At that pace, they can cross the entire expanse of the Pacific Ocean in less than a day.
- Since they are long wavelengths, they lose very little energy along the way.
- In December 2015, the UN General Assembly designated November 5, as World Tsunami Awareness Day.

Note:

Black-necked Crane

- **Black-necked cranes** also known as '**Trung-Trung Karmo**' migrate every winter from Tibet and China's Xinjiang province to Arunachal Pradesh in India.
- **Sangti Valley** in West Kameng district and **Zemithang** of **Arunachal Pradesh** are the only wintering sites of the bird in India. The crane also breeds in Ladakh and Bhutan.
- The bird is revered by the 1 lakh-strong community of **Monpas** (major Buddhist ethnic group of Arunachal Pradesh) as an embodiment of the sixth **Dalai Lama (Tsangyang Gyatso)**.
- It is protected under **Schedule I of Wildlife Protection Act, 1972** – the highest legal protection given to birds and wildlife.
- It has been classified as '**vulnerable**' by the International Union for Conservation of Nature (IUCN) in its Red List of Threatened Species.



Rampant Killing of Mongooses

- Recently **Wildlife Crime Control Bureau (WCCB)** and the Uttar Pradesh forest department seized raw mongoose hair and painting brushes made from it.
- Mongooses are small **carnivorous mammals**, with a long body and tail and a grizzled or banded coat widely found in India.
- They are listed under **Schedule 2 of the Wildlife (Protection) Act, 1972** and their hunting, possession, transportation and trade are offences, punishable with imprisonment up to seven years. They are also protected by the **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)**.
- Traditional hunting communities that prey on them include the Narikuruvas in Tamil Nadu, Hakki Pakki in Karnataka, Gonds in Andhra and Karnataka, and the Gulias, Seperas and Nath in central and northern India.
- **Six different species** are found across the country: Indian grey mongoose, small Indian mongoose, ruddy mongoose, crab-eating mongoose, stripe-necked mongoose and brown mongoose. The Indian grey mongoose is the most commonly found species and also the most hunted.

Wildlife Crime Control Bureau

- WCCB is a **statutory multi-disciplinary body under Wild Life (Protection) Act, 1972** under the Ministry of Environment and Forests, to combat organized wildlife crime in the country.
- It is mandated to collect and collate intelligence related to organized wildlife crime activities.
- It also assists and advises the Customs authorities in inspection of the consignments of flora & fauna as per the provisions of Wild Life Protection Act and CITES.

Asiatic Lion Conservation Project

- The Ministry of Environment, Forest and Climate Change has launched the "**Asiatic Lion Conservation Project**".
- The Asiatic Lion Conservation Project is aimed to **strengthen the ongoing measures for conservation and recovery of Asiatic Lion** with the help of state-of-the-art techniques/ instruments, regular scientific research studies, disease management, Modern surveillance/ patrolling techniques.
- The project will be funded from the **Centrally Sponsored Scheme- Development of Wildlife Habitat (CSS-DWH)** with the contributing ratio being **60:40 of Central and State share**.
- Asiatic lions that **once ranged from Persia (Iran) to Palamau in Eastern India** were almost **driven to extinction by indiscriminate hunting and habitat loss**.
- **Gir Protected Area Network** includes **Gir National Park, Gir Sanctuary, Pania Sanctuary, Mitiyala Sanctuary** adjoining reserved forests, Protected Forests, and Unclassed Forests.
- The Environment Ministry in the past has supported **Asiatic Lion** in Gujarat by including it in **list of 21 critically endangered species for recovery programme**.

21 species identified under the recovery programme are:

Snow Leopard, Bustard (including Floricans), Dolphin, Hangul, Nilgiri Tahr, Marine Turtles, Dugongs, Edible Nest Swiftlet, Asian Wild Buffalo, Nicobar Megapode, Manipur Brow-antlered Deer, Vultures, Malabar Civet, Indian Rhinoceros, Asiatic Lion, Swamp Deer, Jerdon's Courser, the Northern River Terrapin, Clouded Leopard, Arabian Sea Humpback Whale, and Red Panda.

Centrally Sponsored Scheme – Development of Wildlife Habitat (CSS-DWH)

- The Scheme consists of Centrally Sponsored Scheme of Project Tiger (CSS-PT), Development of Wildlife Habitats (CSS-DWH) and Project Elephant (CSS-PE).
- The schemes would result in overall strengthening/consolidation of tiger, elephant and wildlife conservation in the country.
- These schemes would generate employment opportunities resulting in economic upliftment of people in and around tiger reserves/ Protected Areas besides leading to reduction in natural resource dependency with substitution by clean energy use.
- The implementation of the schemes would be done through the respective States in designated Tiger Reserves, Protected Areas and Elephant Reserves.

Decrease in Population of River Dolphins

- **Rise in salinity** in the central and eastern water system of the Indian Sundarbans has resulted in the decrease of population of the **Ganges River Dolphins in the region.**
- **Reasons for rise in salinity:**
 - **Lost connectivity** with the upstream freshwater flow;
 - **Rise in sea level**, triggered by climate change;
 - Hydrological modifications like **water diversion and commission of large barrages upstream.**
- Flow of freshwater to the Sunderbans is crucial for the subsistence of these species as it becomes **difficult for the dolphin to remain submerged** in waters with high salinity.

Ganges River Dolphins

- **Common Name:** Ganges River Dolphin, Blind Dolphin, Ganges Susu, Hihu, Side-swimming Dolphin, South Asian River Dolphin.
- **Scientific Name:** Platanista gangetica
- **IUCN Status:** Endangered
- It is listed on **CITES Appendix I.**
- It is classified under **Schedule 1, Wildlife (Protection) Act, 1972** as this provides absolute protection and offences under these are prescribed the highest penalties.

Baseline Survey of Waterfowl in Kaziranga

- For the **first time survey of various bird species**, specifically the waterfowl was held in **Kaziranga National Park.(KNP)**
- Traditionally the focus of attention in the Kaziranga, has been the '**big four**' — **rhino, elephant, Bengal tiger and Asiatic water buffalo.**
- A good avifauna reflects on the **health of the ecosystem**, and the baseline survey will help to understand the population trend.
- KNP, formed in 1908 is located in the edge of the Eastern Himalayan biodiversity hotspots - Golaghat and Nagaon district.
- In the year 1985, the park was declared as a World Heritage Site by UNESCO.
- It was declared as Tiger Reserve in 2006.

District Mineral Fund

- District Mineral Funds under Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) has accrued Rs. 22,859 crore till November 2018. But only Rs. 5,529 crore of the amount collected is utilized.

Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)

- **Objective:** To minimize/mitigate the adverse impacts, during and after mining, on the environment, health and socio-economic conditions of people in mining districts and also to ensure a sustainable livelihood for the affected people.
- It is **implemented by the District Mineral Foundations (DMFs)** of the respective districts that use the funds collected by the DMF from the miners.
- District Mineral Foundation (DMF) is a **trust set up under Mines and Minerals (Development & Regulation) Amendment Act (MMDRA) 2015 as a non-profit body** in those districts affected by the mining operations.
- **60% of the funds** will be utilized for high priority areas such as **drinking water supply, health care, sanitation, education, skill development, women and child care, the welfare of aged and disabled people and environment conservation.**
- **40% of the fund** will be utilized for **physical infrastructure, irrigation, energy, and watershed development.**

Security

Highlights

- Draft IT Rules Issued by Government 35

Draft IT Rules Issued by Government

The government has released proposed amendments to the Information Technology (IT) Act for public comments, to replace the rules notified in 2011.

- **The aim of the rules is to make social media and internet companies, that have over 50 lakh users, more accountable for the content on their platforms.**
- The proposed amendments **seek to curb “unlawful content”** on social media and make it mandatory for platforms such as WhatsApp, Facebook, and Twitter to **trace “originator” of “unlawful” information.**

Need for Rules

- The **Information Technology Act (IT Act), 2000** was enacted to give a fillip to electronic transactions, to provide legal recognition for e-commerce and e-transactions, to facilitate e-governance, to prevent computer-based crimes and to ensure security practices and procedures.
- Section 79(2)(c) of the IT Act mentions that intermediaries must observe due diligence while discharging their duties, and also observe such other guidelines as prescribed by the Central Government. Accordingly, the **Information Technology (Intermediaries Guidelines) Rules, 2011 were notified in April 2011.**
- Recently, India has seen a rise in the **number of lynching incidents in 2018** mostly due to fake news being circulated through Whatsapp and other social media sites.
- Social media has brought new challenges for the law enforcement agencies, including inducement for the recruitment of terrorists, circulation of obscene content, the spread of disharmony and incitement to violence.

The Information Technology [Intermediaries Guidelines (Amendment) Rules] 2018

- Social media intermediaries should publish rules, privacy policy to **stop users from engaging in on online material which is paedophilic, pornographic, hateful, racially and ethnically objectionable, invasive of privacy, etc.**
- The online intermediaries should **provide information or assistance within 72 hours** when asked by any government agency for reasons of State security, cyber security, investigation, detection, prosecution or prevention of offenses.
 - These offenses may include mob violence, lynching, online sexual abuse, etc. The **“originator of the information” can be traced to register an FIR.**
- The social media intermediaries should take all reasonable **measures to protect individual privacy** as required under the Information Technology Rules of 2011.
- The online intermediaries should **appoint in India, a nodal person of contact for 24×7 coordination with law enforcement agencies** and for ensuring compliance with orders of agencies.
- Online Intermediaries should **remove or disable access to unlawful content, within 24 hours**, for the reasons relatable to Article 19 (2) of the constitution of India such as in the “interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality, or in relation to contempt of court, defamation or incitement to an offense.”
 - The intermediary is also expected to **preserve such information and associated records for at least 180 days for investigation purposes.**

Note:

- The intermediary should deploy **technology based automated tools for identifying and removing or disabling public access to unlawful information or content.**
- The intermediary should **report cyber security incidents with the Indian Computer Emergency Response Team.**
- On their website, the intermediaries should publish the name of the **Grievance Officer and his contact details** and the mechanism by which users **who have suffered can notify their complaints.**

Supreme Court Orders

- These draft rules are in line with various judgments given by the Supreme Court (SC) to deal with malicious online content.
- In July 2018 judgment in the **Tehseen S. Poonawalla case**, the SC gave the government full freedom to stop/curb dissemination of “irresponsible and explosive messages on various social media platforms, which have a tendency to incite mob violence and lynching of any kind.”

- In December 2018 in **Re: Prajwala Letter case**, the SC ordered the government to frame the necessary guidelines/Standard Operating Procedure (SOP) and implement them to “eliminate child pornography, rape and gang rape imagery, videos, and sites in content hosting platforms and other applications”.

Concerns

- The draft rules have been criticized for expanding the **scope for state surveillance of citizens.**
- Draft rules are also violative of Supreme Court Judgement in K. S. Puttaswamy case (Privacy Judgement).

Internet/Online Intermediary

- An internet intermediary is an entity which provides services that enable people to use the internet.
- There are different kinds of internet intermediaries which fall into two categories: “conduits” and “hosts”.
- “Conduits” are technical providers of internet access or transmission services. “Hosts” are providers of content services – for instance, online platforms and storage services.

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Art & Culture

Highlights

- Paika Rebellion (37)
- Ruins of the Church of St. Augustine (37)
- Lalitgiri Museum in Odisha (38)
- Under the Sal Tree Theatre Festival (39)
- Pokkali Paddy (39)
- Pavakoothu Puppetry (39)

Paika Rebellion

The Government has released a commemorative coin and postage stamp in memory of Paika Rebellion.

- The decision to commemorate the bicentenary of the revolution was announced in the 2017-18 Budget Speech.
- Pre-dating what has been popularly regarded as the first war of independence in 1857, the **Paika Bidroha (Paika Rebellion) of 1817 in Odisha** briefly shook the foundations of British rule in the eastern part of India.
- 2017 marked the double centenary of one of the biggest revolts ever seen in eastern India and one which was quelled with great brutality.

Note:

Paikas were essentially the **peasant militias of the Gajapati rulers of Odisha** who rendered military service to the king during times of war while taking up cultivation during times of peace.

Brief History

- Till 1803, Odisha was under Maratha rule, however after the second Anglo-Maratha War, the Marathas were forced to cede most of their territory in Odisha to the British East India Company.
- Establishment of **British rule in Odisha was followed by a policy of repression against the Paikas**. They lost their traditional position in the society and their lands were taken away.
- In addition to losing their estates, the Paikas were also heavily exploited by the revenue collectors under the British.

The Rebellion

- Paikas under the **leadership of Baxi Jagabandhu**, the hereditary chief of the militia army of the Gajapati King of **Khurda** (a kingdom near Puri), rose in rebellion in March 1817, taking support of tribals and other sections of society.
- The Paikas **attacked British symbols of power**, setting ablaze police stations, administrative offices and the treasury during their march towards Khurda.
- The Paikas were supported by the rajas, zamindars, village heads and ordinary peasants. The rebellion quickly spread to different parts of the province.
- British were initially taken aback and then tried to regain lost ground but faced stiff resistance from the rebelling Paikas. However, the Paikas were eventually defeated by the British.
- The Paikas retreated into the thick jungles of Odisha and carried out guerrilla warfare for several years. After successive defeats, the Paika leader, Bakshi Jagabandhu, surrendered to the British in 1825 and lived as a prisoner in Cuttack till his death in 1829.

Ruins of the Church of St. Augustine

The church was built between 1597 and 1602, and is **dedicated to 'Our Lady of Grace' by the Order of Saint Augustine**.



Note:

- The church was abandoned in 1830s due to the repressive policies of the Portuguese government, which resulted in the eviction of many religious orders from Goa.
- In 1842, the **main vault of the church collapsed** after which the entire **structure collapsed in stages**.
- In 1931, the facade and half the tower fell down, followed by more sections leaving only half the tower that is seen today.
- Now **St. Augustine's tower is all that remains** of what was once one of the largest buildings in Goa – The Augustinian Monastery.
- In **1986, UNESCO declared the remnants as the World Heritage Site** which is also the site of the archaeological discovery of the **remains of Queen Ketevan**.
- In the late 1980s, archaeologists from the Soviet Union and Georgia began efforts to trace the relics of Ketevan the Martyr, a Georgian queen who delivered herself as a hostage to Shah Abbas I and was martyred for refusing to give up her faith whose relics are believed to be in Goa.

Architecture

- Originally comprising of four towers **built of laterite and a massive vault**, the dimensions of the edifice **resemble the great imperial cathedrals of the Renaissance era**.
- The **whole structure is supported by soaring pillars**, vestiges of which remain visible today. The **grey basalt columns provide a contrast to the red laterite**.
- The altar of the church has multicoloured Italian tiles and remnants of red and blue paintings.
- The tower's huge bell was moved in 1871 to the Church of our Lady of the Immaculate Conception in Panjim.

Lalitgiri Museum in Odisha

Prime Minister has inaugurated **museum at Lalitgiri in Odisha** which is one of the earliest Buddhist settlements.

- Three sites - **Lalitgiri (the red hill)**, **Ratnagiri (the hill of precious gems)**, **Udayagiri (the hill of the rising sun)** are known as the **diamond triangle of Odisha** representing a rich heritage of architecture and sculpture of the post Mauryan era Indian art which touched a new zenith of excellence.

- **Xuanzang** (Hiuen Tsang) the Chinese pilgrim, who visited Odisha during 639 A.D. had left a vivid graphic account about the then flourishing state of Buddhism.
- The discovery of a huge number of sculptures, images, antiquity, fragments, stone tablets, potteries, coins, stone and terracotta tablets, and many huge stupas have cemented the fact that these three places as described by Xuanzang are the ruins of a university complex called **Pushpagiri University** which shared an **equal status with Nalanda and Vikramshila universities**.
- The Diamond Triangle of Odisha shows that Buddhism was followed quite widely in Odisha and the place was also the centre of learning and excellence.



Headless Sculpture
Lalitgiri

Buddha Heads
Ratnagiri

Buddha Statue
Udayagiri

Lalitgiri

- Lalitgiri is believed to be the most sacred among the three sites as it unearthed a massive stupa where a **relic of Buddha was discovered inside a stone casket**.
- During excavation structural remains of a large brick built **apsidal chaitya griha** with a circular stupa in the center was found. The discovery of such edifice is first of its kind in the Buddhist context in Orissa.
- Majority of the sculptures unearthed from excavation are the figures of Buddha in different postures belonging to **Mahayanistic phase of Buddhism**.
- Inscribed potsherds belonging to different time spans i.e. post Mauryan period to 8th-9th century A.D. have been found which suggest that the Lalitgiri was under occupation by the both **Hinayana and Mahayana sects**.
- In subsequent period the site came under the control of **Vajrayana faith of Buddhism** patronized by the ruling Bhaumakaras (9th-10th cent A.D).
- It is evident how Hinduism made an entry into Buddhism through Vajrayana. All Buddhist gods and goddesses have replicas of various Hindu gods. Some of them like Aparajita Tara, Padmapani, Hariti, Vajrapani, Manjusri are close to common Hindu gods.
- **Lalitgiri shows the cultural continuity right from the post Mauryan period to 13th century A.D without any break.**

Udaygiri

- Udayagiri known as **Madhavapura Mahavihara** was a prominent centre of Buddhism between the 7th and 12th centuries.
- The excavation had partially revealed a double storied monastic complex datable to 8th century A.D. and important antiquities images of Buddha, Tara, Manjusri, Avalokitesvara, Jatamukuta Lokeshvara and terracotta sealings.

Ratnagiri

- Excavation of this site brought to light the remains of a magnificent Buddhist establishment consisting of a stupa, monastic complex, shrines, votive stupas, myriad of sculptures, architectural fragments and other antiquities.
- Many **giant Buddha heads** found here resemble the Buddha heads found in **Barbadur in Indonesia** and **Anuradhapura in Sri Lanka**.

Under the Sal Tree Theatre Festival

- 'Under the Sal Tree' theatre festival is held every December inside the sal forest of **Rampur village in Goalpara district of Assam**.
- It is a three day theatre festival organised in the middle of a jungle with an **aim to connect human beings with nature**.
- The festival was initiated by the noted Assamese theatre personality **Sukracharya Rabha**.

Pokkali Paddy

- **Endemic to Central Kerala**, the Pokkali paddy variety, which grows to a height of up to 2 metre, survived the devastating floods.

- The **GI-tagged Pokkali** is a **saltwater-tolerant paddy** grown in the coastal fields of **Alappuzha, Ernakulam and Thrissur districts of Kerala**.
- This traditional farming of Pokkali paddy is facing threat as farmers are not getting satisfactory return despite it fetches good price in the market.
- **Local societies, cooperative banks and Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) groups** have stepped in to protect this variety of rice, which the local people believe has **medicinal properties**.
- Pokkali is an **ancient farming practice**. One season of rice farming is alternated with **another season of prawn culture**.

Pavakoothu Puppetry

- In Kerala, the traditional **glove puppet play** is called Pavakoothu.
- It came into existence during the **18th century due to the influence of Kathakali**, the famous classical dance-drama of Kerala.
- The head and the arms of puppet are carved of wood and joined together with thick cloth, cut and stitched into a small bag.
- The face of the puppets are decorated with paints, small and thin pieces of gilded tin, the feathers of the peacock, etc.
- The manipulator puts his hand into the bag and moves the hands and head of the puppet.
- The theme for glove puppet plays in Kerala is based on the **episodes from either the Ramayana or the Mahabharata**.



Social Issues

Highlights

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- Eklavya Model Residential Schools (41)
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- Ujjwala Yojana Extended to all Poor Households (44)

Global Gender Gap Report-2018

Recently the Global Gender Gap Report has been published by the **World Economic Forum (WEF)**.

- India has been ranked **108th out of 149 countries** in the Global Gender Gap Index 2018, the same as 2017.
- The report benchmarks countries on their progress towards gender parity on a scale from 0 (disparity) to 1 (parity) across four key pillars- economic participation and opportunity (42%), educational attainment (4.4%), health and survival (4.6%), and political empowerment (77%).
- In addition, the 2018 edition studies skills gender gaps related to **Artificial Intelligence (AI)**.

Key Findings

- **Global Scenario**
 - Despite the global gender gap narrowing slightly in 2018, proportionately **fewer women than men are participating in the labour force** or in political life.
 - **Iceland remains the world's most gender-equal country**. At the current rate of change, the global gender gap will take 108 years to close.
 - Across the four subindexes, on average, the **largest gender disparity is on Political Empowerment**.
 - Overall, the economic gender gap narrowed in 2018. However gender gap in access to health and education, and political empowerment has widened.
 - Women are **under-represented in growing areas of employment that require STEM** (science, technology, engineering and mathematics) skills and knowledge.

- Analysis conducted in collaboration with LinkedIn points to a glaring gender gap that is developing among AI professionals, where women represent only 22% of the AI workforce.

➤ Indian Scenario

- India has recorded improvement in wage equality for similar work.
- India has **closed its tertiary education enrolment gap for the first time** and has managed to keep its primary and secondary gaps closed for the third year.
- However, India continues to rank the third-lowest on health and survival, remaining the world's least-improved country on this subindex over the past decade.
- India has the second-largest artificial intelligence (AI) workforce but one of the largest AI gender gaps.

World Economic Forum (WEF)

- WEF is a Swiss nonprofit foundation established in 1971, based in Geneva, Switzerland.
- Recognized by the Swiss authorities as the international institution for public-private cooperation, its mission is cited as, "committed to improving the state of the world by engaging business, political, academic, and other leaders of society to shape global, regional, and industry agendas".
- Founder and Executive Chairman- Klaus Schwab.

Some major reports published by WEF are:

- **Global Competitiveness Report:** This monitors the performance of countries based on a set of 12 categories called 'pillars of competitiveness', namely institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness, market size, business application and innovation.

- **Global IT Report:** WEF along with INSEAD, and Cornell University publishes this report which examines the increasing proliferation of technology and its effects on advancing global prosperity.
- **Global Risk Report:** It enlists the threats which the world will face in future ranging from geopolitical and geo-economic tensions to environmental degradation and disruptions of the Fourth Industrial Revolution.
- **Global Travel and Tourism Report:** It measures set of factors and policies that enable sustainable development of travel and tourism sector.

Way Forward

- The report highlights the message to policy-makers that countries that want to remain competitive and inclusive will **need to make gender equality a critical part of their nation's human capital development.**
- Policy-makers along with all the stakeholders should fast-forward the process to eliminate gender gap and should take stronger actions in the years to come.
- **Industries must proactively hardwire gender parity in the future of work** through effective training, reskilling and upskilling interventions and tangible job transition pathways, which will be key to narrowing these emerging gender gaps and reversing the current trends.
- Given the depth of the talent gender gap in AI, there is a clear **need for proactive measures to prevent a deepening of the gender gap in other industries where AI skills** are in increasing demand.
- The economies need to be able to **harness all their available talent in order to succeed in the fourth industrial revolution.**
- Proactive measures that support gender parity and social inclusion and address historical imbalances are essential for the health of the global economy as well as for the good of society as a whole.

Eklavya Model Residential Schools

The Central Government has approved the proposal of setting up of **Eklavya Model Residential Schools (EMRSs)** under **Ministry of Tribal Affairs.**

- As per the **budget 2018-19, every block with more than 50% Schedule Tribe (ST) population and at least 20,000 tribal persons, will have an Eklavya Model Residential School by the year 2022.**

- These are being set up by **grants provided under Article 275 (1)** of the Constitution.
- There will be an **autonomous society** under the ministry of tribal affairs — similar to Navodaya Vidyalaya Samiti — to run the EMRSs.
- The objective of EMRS is to provide **quality middle and high level education to Scheduled Tribe** students in remote areas, not only to enable them to avail of reservation in high and professional educational courses and as jobs in government and public and private sectors but also to have access to the best opportunities in education at par with the non ST population.

Background

- STs, **constitute 8.6%** of the country's total population and **11.3% of the total rural population.**
- Despite the **increase in literacy rates** among STs from **8.53% in 1961 to 58.96% in 2011**, and the fact that the **Right to Education Act, 2009** makes it mandatory that all children between the **ages of 6 and 14** be provided **free and compulsory education**, significant disparities exist in enrolment rates, drop-outs, across states, districts and blocks.
- In the case of tribals, **dropout rates are still very high** – 35.6% in Classes I to V; 55% in Classes I to VIII; and 70.9% in Classes I to X in 2010-11, according to the Statistics Of School Education 2010-2011.
- According to a **2014 UNICEF-sponsored South Asia regional study All Children in School by 2015**, economic and socio-cultural factors are reasons behind the education deprivation for certain groups in India, especially SCs, STs and Muslims.
- The **India Human Development Survey** shows the incidence of poverty is **highest among the STs (49.6%), followed by the SCs (32.3%), and then the Muslims (30.6%).**

Conclusion

- EMRS can impact quality education to Scheduled Tribes (ST) children. Apart from school building, hostels and staff quarters, playgrounds, computer labs and teacher resource rooms are also included in the scheme. This initiative will benefit ST students immensely.
- By focusing on specific intervention to cater to the educational needs of STs, their quality of life is expected to improve to the level of the rest of the social groups and a visible impact will be seen by the 2021 Census.

Survive and Thrive: Transforming Care for Every Small and Sick Newborn

According to a recent study by a global coalition that includes **UNICEF** and **WHO**, the world will not achieve **Sustainable Development Goal 3 (to ensure healthy lives and promote wellbeing for all at all ages)** unless it transforms care for every newborn.

- According to UNICEF, India witnesses **25.4 newborn deaths per 1,000 births and 0.64 million newborn deaths annually**. The Sustainable Development Goal for neonatal deaths requires all countries **to bring down the figure to 12 deaths or less per 1,000 births by 2030**.

Key Findings

- An estimated **30 million newborns** require specialised care in hospital every year without which many either die or develop preventable health conditions and disabilities that affect them for life.
- Newborns who are born too soon or too small, or who become sick, are at the greatest risk of death and disability.
- The challenges facing small and sick newborns and their families include **scarce services, barriers to care-seeking (such as a lack of awareness, transportation or finances) and discrimination**.
- Additionally, the **financial and psychological toll** on their families can have detrimental effects on their cognitive, linguistic and emotional development.
- **Universal access to quality care** could prevent 1.7 million neonatal deaths, or 68% of the deaths that will otherwise occur in 2030.
- As many as 2.9 million women, stillbirths and newborns can be saved during 2030 in 81 high-burden countries if there are interventions for both mother and newborn at the same time, at the same place, by the same healthcare provider.

Recommendations

- Providing **round-the-clock inpatient care** for newborns seven days a week.
- **Training nurses** to provide hands-on care working in partnership with families.

- A **family-centred approach** that strengthens parents' skills and competence in caring for their small, sick or high-risk infant reduces the stress and anxiety, and benefits the newborn with weight gain and neurodevelopmental progress.
- Providing good quality of care should be a part of a country's policies, and a lifelong investment for those who are born small or sick.
- For continuous quality improvement, countries not only **need to collect data** about small and sick newborns but also to **monitor the data systematically, evaluate it rigorously**, and – while guaranteeing confidentiality and data security – share it with relevant partners. Only then can decision-makers guide investments and drive action for better newborn survival and development outcomes.
- Low and middle income countries will be able to avert two out of every three neonatal deaths by 2030 if they increase their **investment by \$0.20 per capita**.

Way Forward

- The report maps out a **pathway towards 2030**. To transform all aspects of newborn care, from its availability and quality to its uptake and affordability **requires all stakeholders** – governments and partners, competent health-care professionals, professional associations, private sector organizations, researchers, empowered parents, and engaged communities – **to work together**.

The Transgender Persons (Protection of Rights) Bill 2016

The Lok Sabha has passed the **Transgender Persons (Protection of Rights) Bill 2016**. The bill will now be placed in Rajya Sabha.

- The Bill was brought following a 2014 order of the Supreme Court (**NALSA vs. Union of India**) that asked the central and state governments to take steps for the welfare of the transgender community and to treat them as a third gender for the purpose of safeguarding their rights under Part III of the Constitution.

Provisions in the Bill

- **Definition of a Transgender Persons:** In the amended Bill transgender person is defined as a person whose gender does not match with the gender assigned to that person at birth and includes trans-man (whether

or not such person has undergone sex reassignment surgery or hormone therapy or laser therapy or such other therapy), person with intersex variations, gender-queer and person having such socio-cultural identities as kinnar, hijra, aaravani and jogta.

- **Prohibition against discrimination:** The Bill prohibits the discrimination against a transgender person, including denial of service or unfair treatment in relation to: (i) education (ii) employment (iii) healthcare (iv) public goods (v) right to movement (vi) right to reside, rent, own or occupy property (vii) opportunity to hold public or private office and (viii) access to a government or private establishment.
- **Offenses and Penalties:** The Bill recognizes the following as offenses: (i) begging, forced or bonded labor (ii) denial of use of a public place; (iii) denial of residence in the household, village, etc.; (iv) physical, sexual, verbal, emotional and economic abuse.
 - These offenses will attract imprisonment between six months and two years and a fine.
- **Right to be recognized as transgender:** The Bill states that every person has a right to be recognized as a transgender.
- **Certificate of identity for a transgender person:** A transgender person may make an application to the District Magistrate for a certificate of identity, indicating the gender as 'transgender'.
 - The District Magistrate will issue such certificate based on the recommendations of a District Screening Committee.
- **The right of residence:** If the immediate family is unable to care for the transgender person, the person may be placed in a rehabilitation center, on the orders of a competent court.
- **Welfare measures by the government:** The Bill states that the government will take measures to ensure the full inclusion and participation of transgender persons in society.
 - It must also take steps for their rescue and rehabilitation, vocational training and self-employment, create schemes that are transgender-sensitive.
- **Setting up of National Council for Transgender persons (NCT):** Under the Bill, NCT will be set up which will consist of:

- Union Minister for Social Justice (Chairperson);
- Minister of State for Social Justice (Vice-Chairperson);
- Secretary of the Ministry of Social Justice;
- One representative from ministries like Health, Home Affairs, Minority Affairs, Housing and Poverty Alleviation, Human Resources Development, etc.
- Other members include representatives of the NITI Aayog, National Human Rights Commission, and the National Commission for Women. State governments will also be represented.
- The Council will also consist of five members from the transgender community and five experts from non-governmental organizations.

Concerns in the Bill

- The Bill does not give the right of self-identification to transgender persons, instead, it is certified by a district screening committee. Self-identification will provide the transgender community autonomy over their identity, granting the dignity that has been previously deprived.
- Bill is silent on granting reservations to transgender persons. The Bill does not give effect to the directive of the Supreme Court to grant backward class reservation to the transgender community.
- The Bill lacks robustness as it has provision for a lower punishment for sexual violence against transgender persons, as against seven years' imprisonment awarded in case of sexual assault on women.
- The Bill treats transgender persons as victims who need protection rather than an empowered subject with rights.
- The Bill criminalizes begging by making it an offense. When begging itself is no more seen as an offense, it may harm the community if such a means of livelihood – in the absence of employment – is criminalized.
 - In order to protect the targeting of the community, is it desirable that exceptions be carved out for practices traditionally associated with the Hijra community under the anti-begging laws, such as mangti and badhai toli.
- The Bill does not provide a mechanism for appeal if a transgender person is denied a certificate of identity.
- The Standing Committee's concerns about recognizing rights in marriage, divorce and adoption of transgender person have not been addressed.

Note:

Ujjwala Yojana Extended to all Poor Households

- The government has extended Pradhan Mantri Ujjwala Yojana (PMUY) **to all poor households not having LPG connections.**
- The scheme, **launched in 2016**, originally targeted giving LPG connections to mostly rural women members of below the poverty line (BPL) households. The list was later expanded to include all SC/ST households and forest dwellers among others.
- PMUY, initiated by **Ministry of Petroleum & Natural Gas** aims to **safeguard the health of women & children**

by providing them with a clean cooking fuel so that they don't have to compromise their health in smoky kitchens or wander in unsafe areas collecting firewood.

- Under the scheme, the government provides a subsidy of Rs 1,600 to state-owned fuel retailers for every free LPG gas connection that they give to poor households. This subsidy is intended to cover the security fee for the cylinder and the fitting charges.
- The **World Health Organisation** hailed PMUY as decisive intervention by the government to facilitate the switch to clean household energy use, thereby addressing the problems associated with indoor household pollution.



Miscellaneous

Highlights

- Andaman Islands Renamed (45)
- Great Indian Bustard (45)
- Markermeer Lake (45)
- Kashmir Stag (46)
- World's First Drone-delivered Vaccine in Vanuatu (46)
- Award for National Unity (46)

Andaman Islands Renamed

- Three Andaman Islands- the **Havelock, Ross and Neil Island** have been officially renamed on the occasion of **75th anniversary of Subhas Chandra Bose's historic visit to the islands.**

Island	Renamed as
Havelock	Swaraj Dweep
Ross	Netaji Subhash Chandra Bose
Neil	Shaheed Dweep.

- S.C. Bose **hoisted the Indian national flag** at the Gymkhana Ground (now Netaji Stadium) in **Port Blair on December 30, 1943.**
- Andaman Island was the **first Indian territory to be freed from British rule** after the Japanese defeated the British forces during **World War II.**
- At the time, Bose had named **Andaman Island as Shaheed and Nicobar Island as Swaraj.** Bose had also appointed Indian National Army (INA) **General AD Loganathan** as its Governor.

Great Indian Bustard

The population of Great Indian Bustard has significantly shrunk to **less than 150 in five States** (Rajasthan, Gujarat, Maharashtra, Karnataka and Andhra Pradesh).

- **India is the only country** that habitats the Great Indian Bustard.
- It is listed in
- Schedule I of the Indian Wildlife (Protection) Act, 1972
 - Appendix I of CITES
 - Critically Endangered on the IUCN Red List
 - National Wildlife Action Plan (2002-2016).

Threats:

- **Hunting:** The bird was a popular game bird and still is in some pockets.
- **Agriculture:** Habitat of bustards are categorised as 'wastelands', like most grassland habitats in India. The push to make these areas more 'productive' has seen an increase in irrigation facilities in these parts, resulting in the spillover of agricultural land into bustard habitats. Intensification of agriculture, including more pesticides, barbed-wire fences and new crops are endangering the birds' survival.
- **Development:** Their habitat grassland are now sites for renewable power projects. New wind turbines and more power line affect the flight of Bustards as they have **poor frontal vision** and **heavy bodies.**

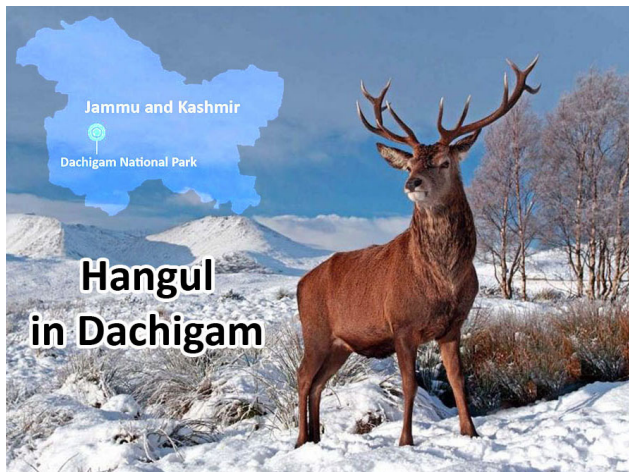
Markermeer Lake

- Markermeer is one of **Europe's largest Freshwater Lake** and is located in the **Netherlands.**
- An artificial archipelago is being built on Markermeer Lake **from the sediments in the lake to bring wildlife back.**



- These islands are named as **Marker Wadden Islands.** These 'Marker Wadden' will form a unique ecosystem that will boost biodiversity in the region.

Kashmir Stag



**Hangul
in Dachigam**

- Kashmir Stag locally known as **Hangul** is a **subspecies of the European red deer**, found in **Kashmir**. It is the only subspecies of red deer in India and the **state animal of Jammu and Kashmir**.
- First identified by Alferd Wagner in 1844, the species is believed to have traveled all the way from Bukhara in Central Asia to Kashmir.
- The animal is classified as '**critically endangered**' by the International Union for Conservation of Nature (IUCN).
- **Dachigam National Park** near Srinagar is considered the last undisturbed home of the Hangul.
- The challenges that hangul faces include poaching, threats from insurgency and the border conflict between India and Pakistan.

World's First Drone-delivered Vaccine in Vanuatu



- A one-month-old baby in **Vanuatu** has become the first person in the world to be immunised using vaccines delivered by a commercial drone which has raised hopes that the method could save lives in other far-flung areas.

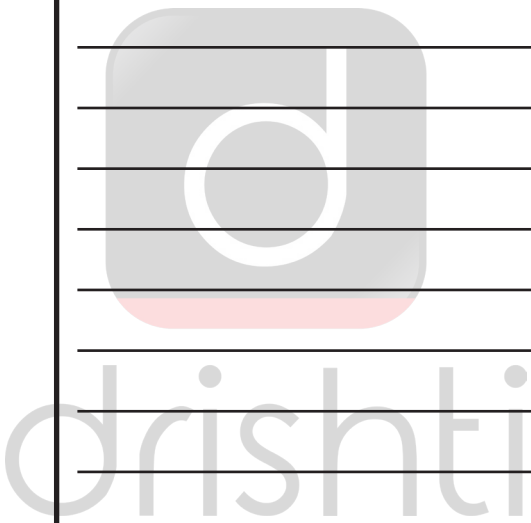
Award for National Unity

- Prime Minister has announced the institution of a **new national honour for national unity** on the pattern of Padma Awards drawing inspiration from **Sardar Patel's** contribution towards unification of the country.
- The annual award will be given to an **Indian** who has contributed to **national unity in any manner**.



Key Points

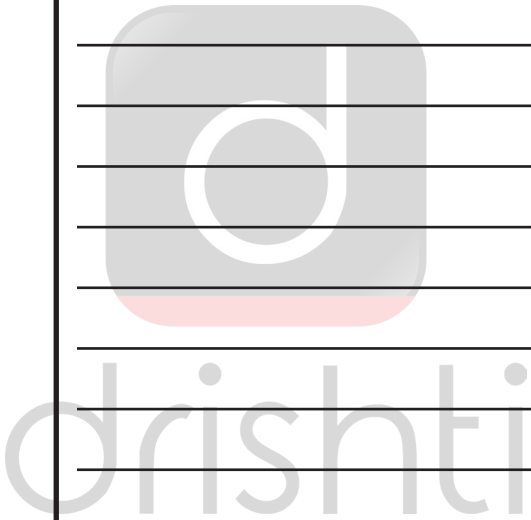
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Summary

Key Points

Details



Summary