

OFFICERS' Pulse

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Coverage.

The Hindu
PIB
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At a Glance & In Depth.

Polity and Social Issues
Economy
International Relations
Environment
Science and Tech
Culture..

CURRENT AFFAIRS WEEKLY

THE PULSE OF UPSC AT
YOUR FINGER TIPS.



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News @ a glance

POLITY

1) Eighth Schedule of the Constitution

- The Constitutional provisions relating to the **8th Schedule** are in articles **344(1)** and **351** of the Indian Constitution:
- **Article 344(1)** - Establishment of a Commission by the President comprising of a Chairman and other members representing the various languages specified in the 8th Schedule to make recommendations to the President for the dynamic use of Hindi for official purposes of the Government of India.
- **Article 351**- The duty of the Union to encourage the spread of the Hindi language to advance it so that it may serve as a medium of communication for all the components of the composite culture of India and to safeguard its enhancement by integrating without interfering with its genius, style and expressions used in Hindustani and in the other languages of India specified in the 8th Schedule, and by drawing, anywhere essential or required, for its terminology, mainly, on Sanskrit and secondarily on other languages.

List of languages in the Eighth Schedule

- The Eighth Schedule to the Constitution consists of the following 22 languages:- (1) Assamese, (2) Bengali, (3) Gujarati, (4) Hindi, (5) Kannada, (6) Kashmiri, (7) Konkani, (8) Malayalam, (9) Manipuri, (10) Marathi, (11) Nepali, (12) Oriya, (13) Punjabi, (14) Sanskrit, (15) Sindhi, (16) Tamil, (17) Telugu, (18) Urdu (19) Bodo, (20) Santhali, (21) Maithili and (22) Dogri.
- Of these languages, **14 were initially included in the Constitution.**
- Sindhi language was added in 1967.
- Thereafter three more languages viz., Konkani, Manipuri and Nepali were included in 1992.

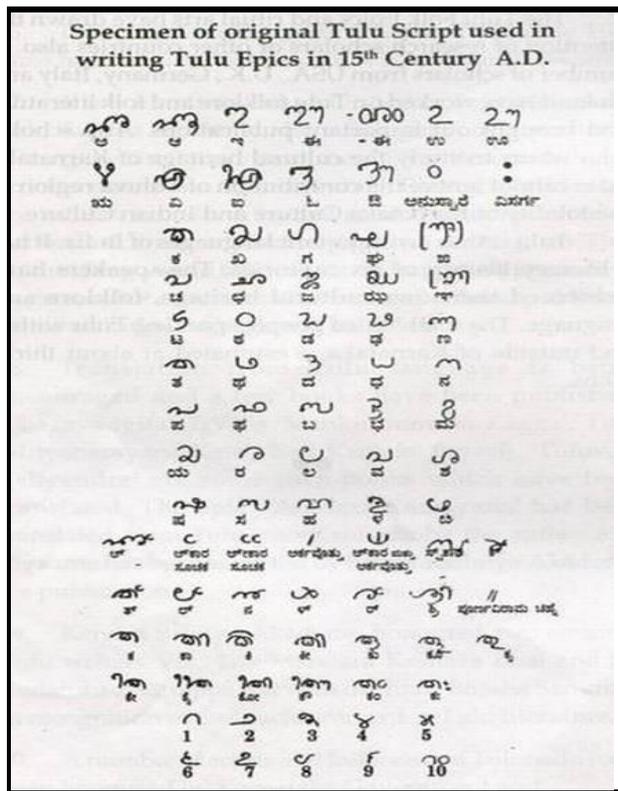
- Subsequently Bodo, Dogri, Maithili and Santhali were added in 2004.

Other Constitutional provisions include:

- **Article 29** of the Indian Constitution deals with the "**Protection of interests of minorities**". It states that any section of the citizens residing in any part of India having a **distinct language, script or culture of its own**, shall have the right to conserve the same.

Why in News?

- Efforts are being made to include Tulu in the Eighth Schedule of the Constitution. **If included in the Eighth Schedule**, Tulu would get recognition from the Sahitya Akademi.
- Tulu books would be translated into other recognised Indian languages. Members of Parliament and MLAs could speak Tulu in Parliament and State Assemblies, respectively.
- Candidates could write all-India competitive examinations like the Civil Services exam in Tulu.



Why Tulu should be given a place in the Eighth schedule?

- Tulu is a Dravidian language whose speakers are concentrated in two coastal districts of Karnataka and Kasaragod district of Kerala.
- Kasaragod district is called '**Sapta bhasha Samgama Bhumi (the confluence of seven languages)**', and **Tulu is among the seven.**
- The Census report of **2001** states that there are 18,46,427 native speakers of Tulu in India.
- The **Tulu-speaking people are larger in number than speakers of Manipuri and Sanskrit**, which have found their place in eighth schedule.
- Robert Caldwell (1814-1891), in his book, A Comparative Grammar of the Dravidian or South-Indian Family of Languages, called Tulu as "one of the most highly developed languages of the Dravidian family".
- The present-day Tulu linguistic majority area is confined to the region of Tulu Nadu, which comprises the districts of Dakshina Kannada and Udupi in Karnataka and the northern part of Kasaragod district of Kerala up to the river Payaswani, or Chandragiri.

- The cities of Mangaluru, Udupi and Kasaragod are the epicentres of Tulu culture.

2) Steel mesh to replace fences on the borders

Why in News?

- India shares 4,096.7 km border with Bangladesh and 3,323 km border with Pakistan. The border currently has barbed wires which will be replaced with meshed fence made of steel and coated with anti-rust paint.

News in Detail:

- The **Border Security Force (BSF)** that is deployed along the Pakistan and Bangladesh borders has been tasked to ensure that the fence is installed in a time-bound manner.
- The **Central Public Works Department (CPWD)** is implementing the project.
- Measures include strengthening Indian defences along Pakistan, mapping of infiltration prone areas along the two borders. Thus this effort will plug vulnerable and infiltration-prone patches along India's sensitive borders with Pakistan and Bangladesh.
- **About BSF**
- BSF is charged with guarding India's land borders during peacetime and preventing transnational crime.
- It is a Union Government Agency under the administrative control of the Ministry of Home Affairs. It came into existence on 1st December, 1965.
- BSF is deployed on Indo-Pakistan International Border, Indo-Bangladesh International Border, Line of Control (LoC) along with Indian Army and in Anti-Naxal Operations.
- BSF currently stands as the world's largest border guarding force.

3) National Company Law Appellate Tribunal (NCLAT)

- The NCLAT was constituted for hearing appeals against the orders of the National Company Law Tribunal (NCLT), which, in turn, simultaneously replaced the erstwhile Company Law Board.
- Constituted under Section 410 of the Companies Act, 2013, the appellate tribunal was conceived as the dedicated appeals forum for resolving corporate law disputes

and speeding up the resolution by taking over the role hitherto played by overburdened High Courts in adjudicating such appeals.

Functions:

- It hears appeals against the orders of National Company Law Tribunal(s) (NCLT), with effect from 1st June, 2016.
- It is the Appellate Tribunal for hearing appeals against the orders passed by NCLT(s) under Section 61 of the Insolvency and Bankruptcy Code, 2016 (IBC).
- It is the Appellate Tribunal for hearing appeals against the orders passed by Insolvency and Bankruptcy Board of India under Section 202 and Section 211 of IBC.
- It is the Appellate Tribunal to hear and dispose of appeals against any direction issued or decision made or order passed by the Competition Commission of India (CCI).

Composition:

- The President of the Tribunal and the chairperson and Judicial Members of the Appellate Tribunal shall be **appointed after consultation with the Chief Justice of India**.
- The Members of the Tribunal and the Technical Members of the Appellate Tribunal shall be appointed on the recommendation of a **Selection Committee** consisting of Chief Justice of India or his nominee as the Chairperson.

Process of appeal:

- A party aggrieved by a ruling by any of the NCLT's numerous benches can file **an appeal against it within 45 days of receipt of a copy of the order, with a further 45 days allowed** if the NCLAT is satisfied that the appellant had sufficient cause that prevented the filing of the appeal within the stipulated period.
- The **NCLAT's verdicts can, in turn, be challenged on a question of law in the Supreme Court, within a 60-day window.**

Why in News?

- In another reversal in the Tata Sons versus Cyrus Mistry case, the Supreme Court (SC) has stayed the order passed by National Company Law Appellate Tribunal (NCLAT) reinstating Mistry as executive chairman.
- The SC bench led by Chief Justice of India (CJI) SA Bobde questioned the "judicial attitude" with which NCLAT passed the

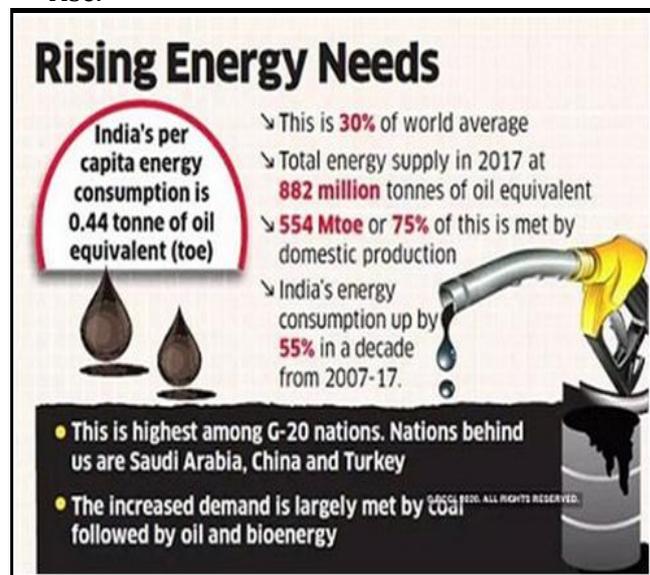
December 18th order reinstating Cyrus Mistry.

- The judges said the attitude of NCLAT was "sorely lacking" with regard to the order.

4) India's Energy Policies 2020

Key findings of the Report:

- India spent \$25 billion in 2018 on subsidies for the consumption of fossil fuels, mostly supporting oil consumption in the form of LPG (\$17 billion) and gas (\$4 billion).
- While the diesel subsidy ended in 2014-15, the government is gradually increasing the prices of kerosene and cooking gas (LPG) to phase out the subsidies.
- India is the world's third largest consumer of oil, the fourth largest oil refiner and a net exporter of refined products.
- The government aims to increase the share of natural gas in the country's energy mix to 15% by 2030, from 6% today.
- Both the energy and emission intensities of India's gross domestic product (GDP) have decreased by more than 20% over the past decade. This represents commendable progress even as total energy-related carbon dioxide (CO2) emissions continue to rise.



Recommendations:

- Government should adopt a long-term energy plan for the country with focus on rationalising the energy prices, building energy infrastructure needs, energy security and access to affordable energy even as the government strives to open up

the sector for private players and move towards cleaner fuels across sectors.

- The draft National Energy Policy by NITI Aayog, currently under consultation, should be adopted swiftly to guide policy making, implementation and enforcement across central and state governments.
- Government should continue reducing and consider phasing out fossil fuel subsidies through the reform of the LPG scheme in favour of cleaner fuels.

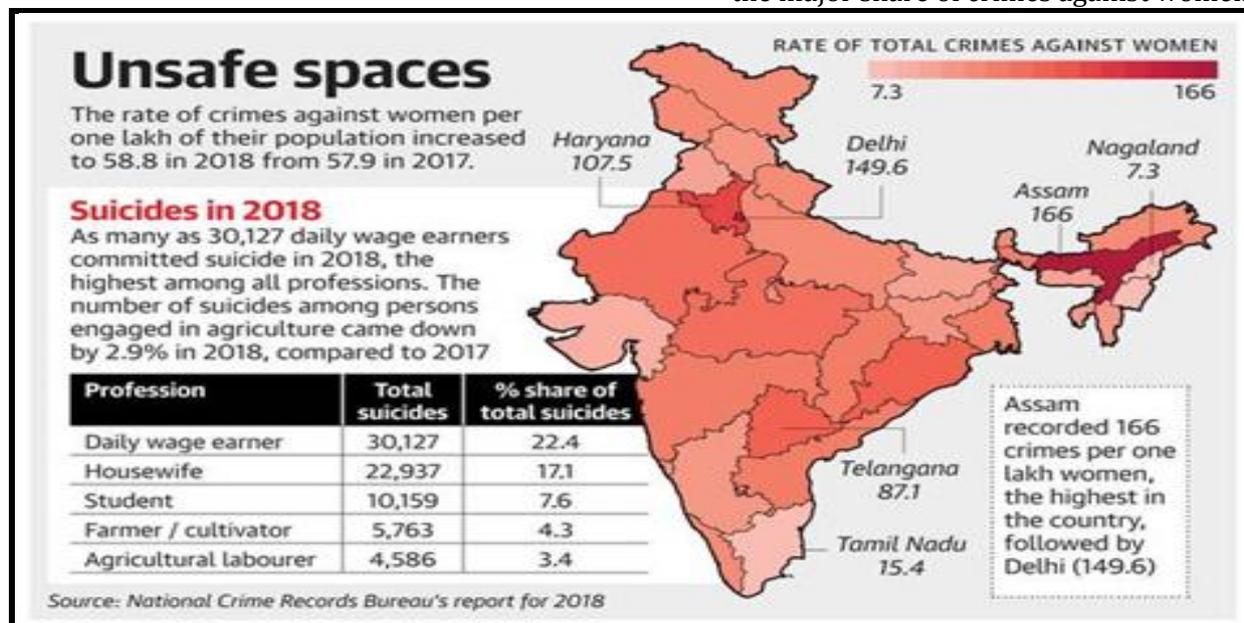
Why in News?

- In partnership with NITI Aayog, the International Energy Agency (IEA) released the first in-depth review of India's energy policies.

5) Annual Crime in India Report 2018

Crimes against women

- According to the report, 3,78,277 cases of crime against women were reported in the country, up from 3,59,849 in 2017.
- **Uttar Pradesh** topped the list with 59,445 cases, followed by **Maharashtra** (35,497) and **West Bengal** (30,394).
- The conviction rate in rape-related cases stood at 27.2% even though the rate of filing charge sheets was 85.3% in such cases.
- Cruelty by husband or his relatives (31.9%) followed by assault on women with intent to outrage her modesty (27.6%) constituted the major share of crimes against women.



Highlights of the report

- The NCRB released the Accidental Death and Suicides in India 2018 report, which said that 10,349 people working in the farm sector ended their lives in 2018, accounting for 7.7 % of the total number of suicides in the country.
- There were 5,763 farmers/cultivators and 4,586 agricultural labourers among those who ended their lives.
- The total number of people who committed suicide in 2018 was 1,34,516, an increase of 3.6% from 2017 when 1,29,887 cases were reported.
- The highest number of suicide victims were daily wagers — 26,589, comprising 22.4% of such deaths.

- The majority of suicides were reported in Maharashtra (17,972) followed by Tamil Nadu (13,896), West Bengal (13,255), Madhya Pradesh (11,775) and Karnataka (11,561)
- The incidents registered under the Scheduled Caste and Scheduled Tribes related Acts saw a decline from 6729 incidents reported in 2017 to 4816 in 2018.

Why in News?

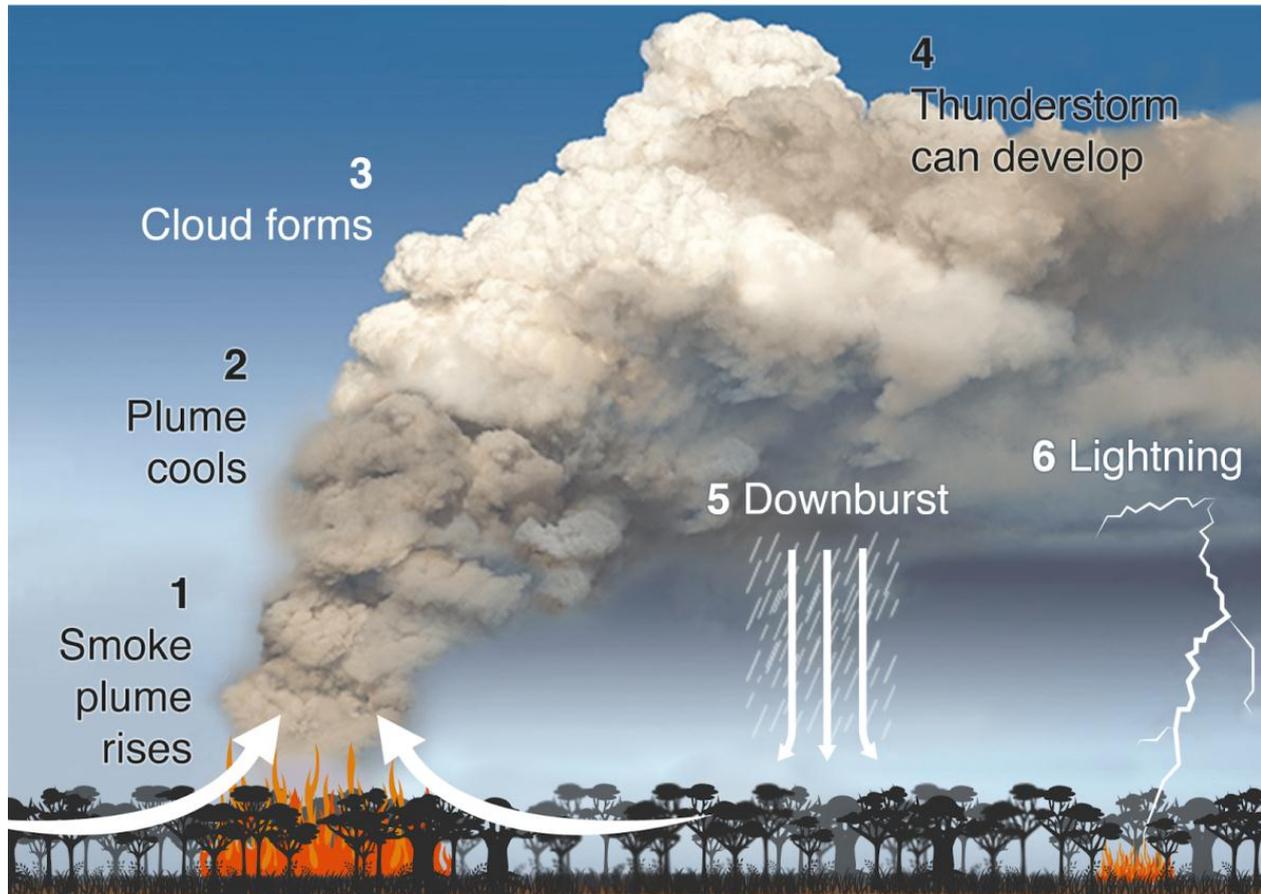
- The National Crime Records Bureau (NCRB) published the annual Crime in India Report 2018.

ENVIRONMENT

1) Australian Bushfires

Bushfires can create their own weather

How pyrocumulonimbus clouds develop



Source: Australia's Bureau of Meteorology

BBC

Why in News?

- Australia is facing bushfires in a catastrophic way which is making it lose a lot of biodiversity.
- Scientists have given warning for mass extinctions of plants and marsupial species such as koalas, kangaroos, etc.
- As the crisis in Australia is happening for the last five months, more than 150 fires are still raging across the continent, some of them merging to create what's known as mega-blazes.
- Already 10,000 hectares of bush, parks and forests have burned, 27 lives have been lost and more than a billion animals are estimated to have perished.

- In the worst-hit state, New South Wales (NSW), fire has affected more than five million hectares, destroying more than 2,000 houses and forcing thousands to seek shelter elsewhere.



About Australian Biodiversity

- Australia is one of only 17 “mega diverse” countries. Much of the species richness is concentrated in areas torched by the current bushfires.
- While some mammals and birds face elevated extinction risk, things will be even worse for small, less mobile invertebrates (which make up the bulk of animal biodiversity).
- For example, the Gondwana Rainforests of New South Wales and Queensland have been badly affected by the fires. These World Heritage listed forests are home to a rich diversity of insects and a huge range of land snails, some restricted to tiny patches.

What are Bushfires?

- Basically bushfires are the combustion or burning of bush, forest or woodland areas. Bushfires are natural hazard or natural disaster, common in Australia and also occur in many places around the world where there is plenty of wood, plant leaves or forest that can burn.

Why this exorbitant bushfires this year?

- The main climate driver behind the heat has been a **positive Indian Ocean Dipole (IOD)** - an event where sea surface temperatures are warmer in the western half of the ocean, cooler in the east.
- The difference between the two temperatures is currently the strongest in 60 years.
- As a result, there has been higher-than-average rainfall and floods in eastern Africa and droughts in south-east Asia and Australia.

2) Kerala to turn to Miyawaki method

Why in news?

- **Kerala** is thinking for afforestation in Miyawaki method.

What is Miyawaki method of afforestation?

- As a young graduate student in the late 1950s, **Akira Miyawaki** learned about the emergent concept of **Potential Natural Vegetation (PNV)**. This, along with his studies in phytosociology—the way plant species interact with each other—guided his explorations of the vegetation growing throughout his native Japan.

- Eventually, he began visiting Shinto sites (local sacred temples) and observing their chinju no mori, or “sacred shrine forests.”
- Miyawaki determined that these were time capsules, showing how indigenous forest was layered together from **four categories of native plantings**: main tree species, sub-species, shrubs, and ground-covering herbs.
- Using this **four-category system**, along with his surveys of these sites and his knowledge of PNV and phytosociology, **Miyawaki designed his own system for planting forests**.
- It works like this: the soil of a future forest site is analyzed and then improved, using locally available sustainable amendments—for example, rice husks from a nearby mill.
- About 50 to 100 local plant species from the above four categories are selected and planted as seedlings in a random mix like you would find growing naturally in the wild.
- The seedlings are planted **very densely**—20,000 to 30,000 per hectares as opposed to 1,000 per hectare in commercial forestry. For a period of two to three years, the site is monitored, watered, and weeded, to give the nascent forest every chance to establish itself.
- During this early period, the plantings compete with each other for space and access to light and water—a **battle that encourages much faster growth**. In conventional afforestation techniques, 1 meter of growth per year is considered the norm. In the Miyawaki method, **trees grow about 10 times faster**. Once stabilized, the forest is left to flourish, forevermore, on its own without further interference.
- Miyawaki has planted over 40 million trees in this way, in 15 countries, including, especially, his own.
- At the age of 91 he continues to plant trees—90 million of them are slated to be put in along Japan’s coast as a buffer against future catastrophic tsunami damage. And disciples like Shubhendu Sharma have emerged to pick up where he will eventually leave off.



- This concept can be used in urban afforestation by turning backyards into mini-forests, which may come up on the government office premises, residential complexes, school premises, and puramboke (unassessed lands) land.

What is the need?

- Kerala, which has suffered floods, landslides and soil erosion, assumes significance with the **Rebuild Kerala initiative on**.
- The Miyawaki afforestation method has been adopted in 15 places with the support of the Nature's Green Guardians Foundation (NGGF), an NGO. Developing each cent under the Miyawaki method is estimated to cost around ₹1 lakh.
- The Forest Department is the nodal agency in the State. To take the initiative forward, each department had been asked to nominate nodal officers in the State and district levels.

3) Chinese paddlefish

Why in news?

- The Chinese Paddlefish becomes the First Extinct Species of 2020



About the fish:

- The Chinese paddlefish (*Psephurus gladius*) was an iconic species, measuring up to 7 m in length, dating back from 200 million years ago, and therefore swimming the rivers when dinosaurs ruled the Earth. Its ancestral home was the **Yangtze River**.
- Paddlefish, like so many aquatic species, were caught between man's desire for progress and the species' need for a large habitat. They were commonly caught in the Yangtze throughout the 1970s, but the erection of the **Gezhouba Dam in 1981** effectively halved its population.
- The dam also trapped the fish and prevented them from swimming upstream to spawn. It was finally designated "threatened" in 1989, but that was too little, too late to ensure its survival. Those paddlefish above the dam were unable to mate and reproduce, the experts said, and eventually died off.
- **The last verifiable sighting of a paddlefish occurred in 2003,**

Criteria for Extinction

- The Red List criteria of the IUCN has several categories for extinction

- Critically Endangered: species faces a high probability of extinction.
- Extinct in the wild: means a species survives only in a captive environment.
- Locally extinct: ceased to exist in a particular area but may exist in other areas.
- Functionally extinct: continues to exist but it has too few members to reproduce meaningfully enough to ensure survival.
- Globally extinct: no surviving member anywhere. When there is no reasonable doubt left that its last member has died.
- Once declared extinct, a species is not eligible for protective measures and conservation funding.

4) Forest Committee approves scheme to 'trade' in forests

Why in news?

- The Forest Advisory Committee has approved a scheme that could allow "forests" to be traded as a commodity.
- If implemented, it allows the Forest Department to outsource one of its

responsibilities of reforesting to non-government agencies.

What is Forest Advisory Committee?

- It is a committee is set under the Ministry of Environment, Forest and Climate Change tasked with adjudicating requests by the industry to raze forest land for commercial ends.

What is current system?

- Presently, industry needs to make alternative arrangement of the loss of forest by finding appropriate non-forest land — equal to that which would be cut down.
- It also must pay the State Forest Department the current economic equivalent — called Net Present Value — of the forest land.
- It's then the Forest Department's responsibility to grow appropriate vegetation that, over time, would grow into forests.
- Industries have often complained that they find it hard to acquire appropriate non-forest land, which has to be contiguous to existing forest.

Green Credit Scheme

- The proposed 'Green Credit Scheme', as it is called, allows agencies — they could be

private companies, village forest communities — to identify land and begin growing plantations.

- **After three years**, they would be eligible to be considered as compensatory forest land if they met the Forest Department's criteria.
- An industry needing forest land could then approach the agency and pay it for parcels of forested land, and this would then be transferred to the Forest Department and be recorded as forest land

Benefits:

- It will help in meeting international commitments such as sustainable development goals and nationally determined contributions.
- It will encourage plantation by individuals outside the traditional forest area.

Criticism:

- It does not solve the core problems of compensatory afforestation.
- It creates problems of privatising multi-use forest areas as monoculture plantation plots. Forests are treated as a mere commodity without any social or ecological character.

ECONOMY

1) Securities Appellate Tribunal (SAT)

About SAT

- Securities Appellate Tribunal is a **statutory body** established under the provisions of the **Securities and Exchange Board of India Act, 1992**.
- Its main function is to hear and dispose of **appeals against the orders** passed by the **Securities and Exchange Board of India** or by an adjudicating officer under the Act.
- Since 2014, SAT hears and disposes of appeals against the **orders passed by the Pension Fund Regulatory and Development Authority (PFRDA)** under the **PFRDA Act, 2013**.
- SAT also hears and disposes of appeals against the **orders passed by the Insurance Regulatory Development Authority of India (IRDAI)** under the **Insurance Act, 1938**, the **General Insurance Business (Nationalization) Act, 1972** and the **Insurance Regulatory and Development Authority Act, 1999**.
- The Tribunal has only one bench which sits at **Mumbai**.

Composition of SAT

- SAT consists of:
 1. A Presiding Officer &
 2. Two other members
- The Presiding officer of SAT shall be appointed by the Central Government in consultation with the Chief Justice of India or his nominee.
- The two members of SAT shall be appointed by the Central Government.

Why in News?

- An ongoing tussle between the Insurance Regulatory and Development Authority of India (IRDAI), Nippon India Mutual Fund and Credit Suisse is likely to head to the Securities Appellate Tribunal (SAT).

Points to note from the issue

- The foreign holding for an insurance company is capped at 49% by the Insurance Act, 1938.

2) Stressed urban cooperative banks to face PCA-like curbs

Cooperative Banks

- Cooperative banks are established with the aim of funding agriculture and allied sectors and to finance village and cottage industries.
- They are registered as cooperative societies under the provisions of the **State Cooperative Societies Act**.
- They are **regulated and supervised by the Registrar of Cooperative Societies (RCS) of State** concerned.
- **RBI regulates and supervises** the banking functions of cooperative banks under the provisions of Banking regulation Act, 1949.

Structure of Cooperative Banks in India

COOPERATIVE CREDIT SOCIETIES

- **PRIMARY AGRICULTURAL**
 - These are small societies catering to agricultural needs in villages
 - Regulators-STATE GOVT/NABARD
- **PRIMARY URBAN**
 - Employees' Credit Societies and Credit Societies come under this purview.
 - These are small societies which cater to credit needs of city dwellers.
 - Regulator-STATE GOVT

COOPERATIVE BANKS

- **STATE COOPERATIVE BANKS (FIRST TIER)**
 - They obtain '**license to operate**' from RBI under **Banking Regulation Act**
 - They operate as the **apex bank for all the cooperative societies in the State**
 - They can seek permission from State Govt /RBI to open their branches outside the State
 - RBI provides credit to cooperative societies through them at concessional rate (below what is provided to commercial banks)
 - Regulator: STATE GOVT/NABARD/RBI (limited control)
- **DISTRICT CENTRAL COOPERATIVE BANKS (2-TIER)**
 - They operate as the **apex bank for all cooperative societies in the District**
 - Main activity is to fund (lend money) affiliated Primary Societies

- They accept deposit from public & lend for different purposes
- Regulator: STATE GOVT/ NABARD & partial control of RBI
- **PRIMARY/ URBAN COOPERATIVE BANKS (3-TIER)**
- They are **non-agricultural credit societies**
- They operate mostly in urban & semi-urban areas
- They provide trade/housing finance & other purposes
- They accept deposits from public; but they also work on borrowed capital
- Regulator: STATE GOVT/RBI (Partial Control)

Why in News?

- The RBI has decided to impose restrictions on urban cooperative banks (UCBs) for deterioration of financial position, in line with the prompt corrective action (PCA) framework that is imposed on commercial banks.

Supervisory Action Framework (SAF)

- The RBI has rationalised its supervisory framework for **urban co-operative banks (UCBs)** to expedite resolution of UCBs experiencing financial stress.
- Under this revised Supervisory Action Framework (SAF), UCBs will face restrictions for worsening of three parameters:
 - when net **non-performing assets exceed 6%** of net advances,
 - when they **incur losses for two consecutive financial years** or have accumulated losses on their balance sheets, and
 - if **capital adequacy ratio (CAR)** falls below **9%**.
- Action can also be taken if there are serious governance issues.

Corrective measures under SAF

- For breach of such risk thresholds, UCBs will be asked to submit a board-approved action plan to correct the situation like reducing net NPAs below 6%, for restoring the profitability and wiping out the accumulated losses, and increasing capital adequacy ratio to 9% or above within 12 months.
- The RBI may also seek a board-approved proposal for merging the UCB with another bank or converting itself into a credit society if CAR falls below 9%.

- It can impose restrictions on declaration or payment of dividend or donation without prior approval if any one of the risk thresholds is breached.
- Some of the other curbs include restricting fresh loans and advances carrying risk-weights more than 100% on incurring capital expenditure beyond a specified limit and on expansion of the balance sheet.
- The RBI said actions such as imposition of all-inclusive directions under **Section 35A of the Banking Regulation Act, 1949**, and issue of show-cause notice for cancellation of banking licence may be considered when continued normal functioning of the UCB is no longer considered to be in the interest of its depositors/public.

3) Services Business Activity Index

What is a service PMI?

- The services PMI were introduced in 1996 by IHS Markit's economists to accompany the existing manufacturing PMI.
- With the service sector accounting for a larger proportion of GDP than manufacturing, the services PMI was born out of a need for analysts to better understand changing business conditions in the wider economy.
- The services PMI has fewer questions than the manufacturing PMI due to some questions, such as inventories, not being relevant to many service providers.
- Coverage includes financial services, consumer services and all other business services.
- It is also called as Services Business Activity Index.
- A PMI figure above 50 denotes expansion in business activity. Anything below 50 denotes contraction.

What is a composite PMI?

- A composite PMI is the weighted average of manufacturing and service sector PMIs for a given geography or economy, produced by IHS Markit.
- Weights are derived from official data relating to each sector's contribution to GDP (value added).
- For more details about PMI, refer *Officers' Pulse Issue No. 26*.

Why in News?

- The **IHS Markit India Services Business Activity Index** improved from 52.7 in November to 53.3 in December 2019.

4) Universal Service Obligation Fund (USOF)

Need for USOF

- Apart from the higher capital cost of providing telecom services in rural and remote areas, these areas also generate lower revenue due to lower population density, low income and lack of commercial activity.
- Thus normal market forces alone would not direct the telecom sector to adequately serve backward and rural areas.
- Keeping in mind the inadequacy of the market mechanism to serve rural and inaccessible areas on one hand and the importance of providing vital telecom connectivity on the other, most countries of the world have put in place policies to provide Universal Access and Universal Service to ICT.

Formation of USOF

- The **New Telecom Policy - 1999** (NTP'99) provided that the resources for meeting the Universal Service Obligation (USO) would be raised through a '**Universal Access Levy (UAL)**', which would be a percentage of the revenue earned by the operators under various licenses.
- The **Universal Service Support Policy** came into effect from 01.04.2002.
- The **Indian Telegraph (Amendment) Act, 2003** gave **statutory** status to the Universal Service Obligation Fund (USOF).
- The Rules for administration of the Fund is known as **Indian Telegraph (Amendment) Rules, 2004**.
- As per the Indian Telegraph Act 1885 (as amended in 2003, 2006 and 2008), the Fund is to be utilized exclusively for meeting the Universal Service Obligation.

- **Bharat Net** project to provide on demand, affordable broadband connectivity of 2 Mbps to 20 Mbps for all households is entirely being funded by USOF.

- For more details about Bharat Net, refer *Officers' Pulse Issue No. 29*.

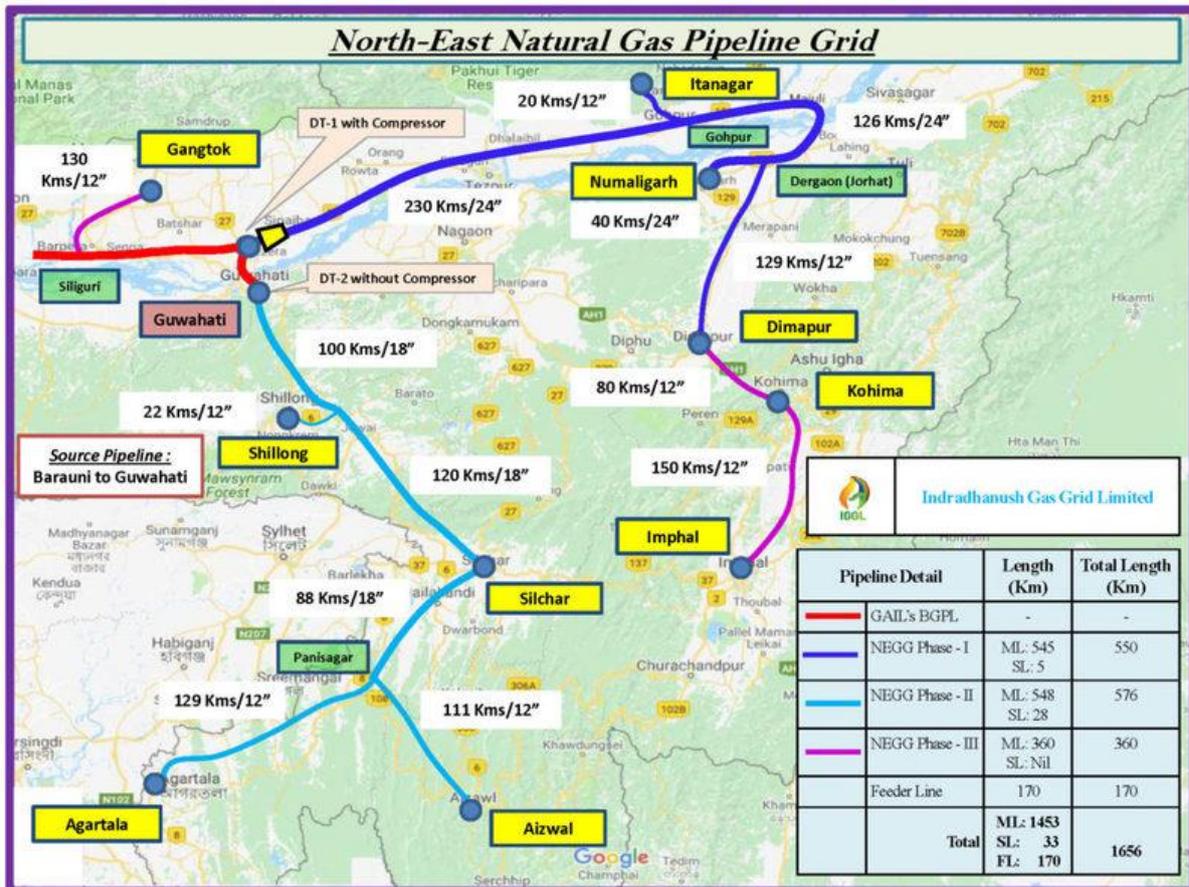
Why in News?

- The Telecom industry representatives raised demand for reduction in universal service obligation (USO) fund to 3% and licence fee to 1% as well as refund of accumulated input tax credit.

5) North-East Natural Gas Pipeline Grid

About the North-East Natural Gas Pipeline Grid

- The 1,656-km North-East Natural Gas Pipeline Grid will connect **Guwahati** in Assam to major cities in the region such as **Itanagar, Dimapur, Kohima, Imphal, Aizwal, Agartala, Shillong, Silchar, Gangtok, and Numaligarh**.
- The gas pipeline grid will be developed in the eight states of the North-Eastern region -- **Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura**.
- The pipeline will enable the supply of **piped cooking gas** to households and **CNG** to automobiles, besides fuel to industry.
- The North-East pipeline grid is to be implemented by **Indradhanush Gas Grid**, a **joint venture of state-owned GAIL India, Indian Oil Corp (IOC), Oil and Natural Gas Corp (ONGC), Oil India Ltd (OIL) and Numaligarh Refinery Ltd (NRL)**.
- This is the second time that a gas pipeline project in the country will be funded by the government (after JHBDPL).
- The project is critical towards implementing the government's **Hydrocarbon Vision 2030 for the North-East**.



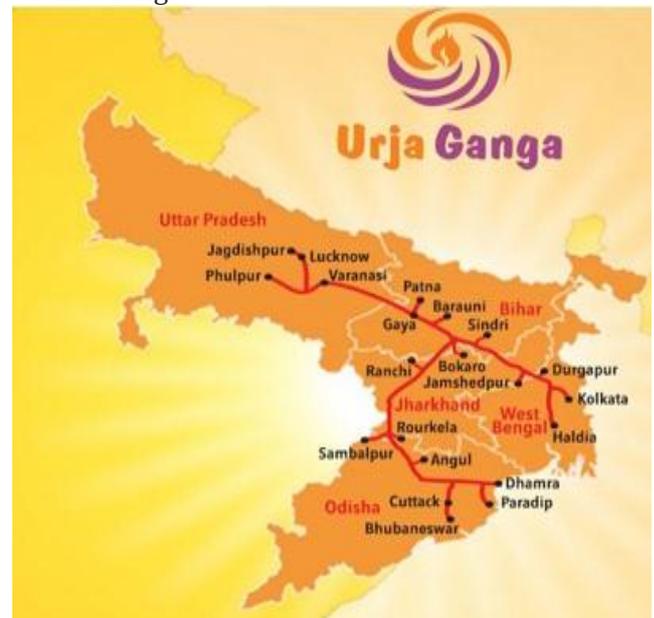
Benefits of the pipeline Grid

- It will provide natural gas supplies to various types of consumers and would help in substituting liquid fuels.
- The pipeline grid would ensure reliability and uninterrupted natural gas supplies to the consumers which otherwise gets severely affected due to various reasons in this part of the country.
- Availability of natural gas across the region is expected to boost industrial growth without impacting the environment and would offer better quality of life to the people in general due to use of cleaner and green fuel.
- The move will boost exploration and production of gas in the region and help in early monetisation of natural resources.
- Possibility of installing bottling plants for LPG can be explored for reducing transportation cost.

JHBDPL gas pipeline

- In 2016, the government provided a capital grant of Rs. 5,176 crore, or 40% of the project cost of the 2,655-km Jagdishpur-Haldia and Bokaro-Dhamra (JHBDPL)

gas pipeline project, which GAIL is currently executing.



- GAIL is also laying a 750-km line from **Barauni to Guwahati** as part of the Rs. 12,940 crore JHBDPL project, which is also known as the **Pradhan Mantri Urja Ganga** project.
- This is proposed to be connected to the North-East via the **Indradhanush grid**.

- All other pipelines in the country have been funded by public or private sector companies.

Hydrocarbon Vision 2030 for the North-East

- The vision envisages the development of the region by leveraging its hydrocarbon potential, enhancing access to clean fuel and accelerating the growth.
- About 20% of India's natural gas production comes from the North-East.
- Out of about 75 million standard cubic meters per day of gas output, 15 mmscmd come from North East.
- Currently Assam, Arunachal Pradesh and Tripura have established gas production potential while there are possibilities for the same in Nagaland and Manipur.

National Gas Grid

- The funding support to the gas grid is a part of a broader goal of the government to raise the share of natural gas in the country's energy mix to 15% by 2030 from current 6.2%.
- The government has envisaged developing the National Gas Grid.
- At present, about 16,788 km natural gas pipeline is operational and about 14,239 km gas pipelines are being developed to increase the availability of natural gas across the country.

Why in News?

- In only the second instance of the government directly funding a gas pipeline, the Cabinet Committee on Economic Affairs (CCEA) approved a Rs. 5,559 crore **viability gap funding** for the proposed northeast gas grid.
- Quantum of viability gap funding (VGF) would be capped at 60 per cent of estimated project cost.

- **Viability Gap Funding (VGF)** Means a grant one-time or deferred, provided to support infrastructure projects that are economically justified but fall short of financial viability.
- The lack of financial viability usually arises from long gestation periods and the inability to increase user charges to commercial levels.

6) Government Owned Contractor Operated model (GOCO)

About GOCO

- A GOCO partnership allows each partner to perform duties for which it is uniquely suited: the government establishes mission areas, and the private sector implements the missions, using best business practices.
- The GOCO allows proven private-sector processes to operate without bureaucratic restrictions.

Why in News?

- The Army has initiated the process of identifying potential industry partners to implement the Government Owned Contractor Operated (GOCO) model for its base workshops and ordnance depots intended to improve operational efficiency.

Background

- The GOCO model was one of the recommendations of the **Lt. Gen. DB Shekatkar (Retd.) committee** to "enhance combat capability and re-balancing defence expenditure."
- Based on the recommendations, the government has "decided to disband two advance base workshops, one static workshop and four ordnance depots" and eight ABWs are recommended to be corporatized on GOCO model.

Working of GOCO model

- Under the model, the selected Service Provider will **take over present infrastructure and related services** from COD Kanpur on "as-it-is-and-where-it-is basis".
- **Maintenance** of complete infrastructure will be thereafter the **responsibility of the service provider**.
- The existing civilian manpower/workforce will have to be absorbed by the selected Service Provider.
- The functions of COD Kanpur envisaged for outsourcing under the GOCO model include warehousing operations, transportation of stores and area maintenance.
- The service provider **should be an Indian registered company** with at least 10 years of working experience in related domains and have an average annual turnover of Rs. 50 crore for each of the last three financial years.

7) National Strategy for Financial Inclusion (NSFI)

Why in News?

- The Reserve Bank of India (RBI) has chalked out an ambitious strategy for financial inclusion for the period 2019-2024.

About NSFI

- **Financial inclusion** is increasingly being recognised as a key driver of economic growth and poverty alleviation the world over.
- NSFI aims to strengthen the ecosystem for various modes of digital financial services in all Tier-II to Tier VI centres to create the necessary infrastructure to move towards a less-cash society by March 2022.
- One of the objectives of the strategy includes increasing outreach of banking outlets of to provide banking access to every village within a 5-km radius or a hamlet of 500 households in hilly areas by March 2020.
- RBI said that the aim was also to see that every adult had access to a financial service provider through a mobile device by March 2024.
- With the aim of providing basic financial services, a target has been set that every willing and eligible adult, who has been enrolled under the **Prime Minister Jan Dhan Yojana**, be enrolled under an insurance scheme and a pension scheme by March 2020.
- The plan is also to make the **Public Credit Registry (PCR)** fully operational by March 2022 so that authorised financial entities could leverage the same for assessing credit proposals from all citizens.

8) National Pension System (NPS) and Atal Pension Yojana (APY)

About NPS

- NPS is a **voluntary**, defined contribution **retirement savings scheme** designed to enable the subscribers to make optimum decisions regarding their future through systematic savings during their working life.
- NPS seeks to inculcate the habit of saving for retirement amongst the citizens.
- It is an attempt towards finding a sustainable solution to the problem of providing adequate retirement income to every citizen of India.
- The scheme is structured into **two tiers**:
 1. **Tier-I account**: This is the **non-withdrawable permanent retirement**

account into which the accumulations are deposited and invested as per the option of the subscriber.

2. **Tier-II account**: This is a **voluntary withdrawable account** which is allowed only when there is an active Tier I account in the name of the subscriber.
 - The limit of deduction u/s 80CCD of the Income-tax Act on account of contribution by the employee to National Pension Scheme (NPS) has been increased from Rs. 1 lakh to Rs. 1.50 lakh.
 - A deduction of Rs. 50,000/- over and above the limit of Rs. 1.50 lakh to any individual who makes contribution to NPS has been allowed.

Models under NPS

- To cater to various categories of people, there are several models of NPS. They are
 1. All citizen model
 2. Government sector model
 3. Corporate model
 4. Atal Pension Yojana

All citizen model

- **Eligibility** - All citizens (whether resident or non-resident) between 18 – 65 years of age.

Government model

- An employee is mandatorily covered under National Pension System (NPS) if
- S/he has joined the services of Government of India on or after 01-01-2004 (except Armed Forces) OR
- S/he is an employee of a Central Autonomous Body who has joined on or after 01-01-2004.

Corporate model

- The employees of a corporate entity, enrolled by the employer having Indian Citizenship between the age of 18-65 years are eligible to be registered as subscribers under NPS.

About APY

- Atal Pension Yojana (APY) addresses the old age income security of the working poor and the longevity risks among the workers in **unorganised sector**.
- It is open to all bank account holders who are **not members of any statutory social security scheme**.
- The **minimum age of joining APY is 18 years and maximum age is 40 years**.
- Therefore, **minimum period of contribution** by the subscriber under APY

would be **20 years** or more as they will be receiving pension benefits from their 60 years of age.

- Under the APY, the **Central Government's co-contribution of 50%** of the subscriber's contribution upto Rs. 1000 per annum, was available to each eligible subscriber, for a period of 5 years, i.e. from 2015-16 to 2019-20, who join APY before 31st March, 2016 and who is not a beneficiary of any social security scheme and is not an income tax payer.
- Government would also reimburse the promotional and development activities including incentive to the contribution collection agencies to encourage people to join the APY.

Benefits of APY

- **Fixed pension** for the subscribers **ranging between Rs.1000 to Rs. 5000**, if s/he joins and contributes between the age of 18 years and 40 years. The contribution levels would vary and would be low if subscriber joins early and increase if s/he joins late.
- The same pension is payable to Spouse after death of Subscriber.
- Return of indicative pension wealth to nominees after death of spouse.

- Contributions to the Atal Pension Yojana (APY) are eligible for tax benefits similar to the National Pension System (NPS). The tax benefits include the additional deduction of Rs 50,000 under section 80CCD(1).

Why in News?

- Pension Fund Regulatory and Development Authority (PFRDA) said that a certain mindset of individuals and corporates makes National Pension System (NPS) a less-preferred saving option.
- For instance, some 7,000 corporates in the country are currently registered with PFRDA, but only 10 lakh of employees are covered under NPS.

News in Detail

- NPS currently has a total subscriber base of 3.25 crore, (with Rs. 4 lakh crore under investment as on December 31) which includes Central and State Government employees (66 lakh), employees of Central and State autonomous bodies, corporates, NRIs (6,000) and individuals.
- APY now has a base of 2 crore subscribers, mostly people from the unorganised sector including labourers, farmers, construction workers, and daily-wage workers.

International Relations

1) World Trade Organization

About WTO

- The World Trade Organization (WTO) is the **only global international organization dealing with the rules of trade** between nations.
- It was established in 1995 as a result of the **Uruguay Round negotiations (1986-94)**.
- It **superseded the 1947 General Agreement on Tariffs and Trade (GATT)** created in the wake of World War II.
- Whereas the GATT mainly dealt with trade in goods, the WTO and its agreements **also cover trade in services and intellectual property**.
- It is a forum for governments to negotiate trade agreements and also a place for them to settle trade disputes.
- The WTO has **164 members** representing **98 percent of world trade**.
- All major decisions are made by the WTO's member governments: either by ministers (Ministerial Conference) or by their ambassadors or delegates (General Council).
- The WTO's **top decision-making body** is the **Ministerial Conference** which usually take place every two years.
- The **General Council** is the top day-to-day decision-making body. It meets a number of times a year at its **headquarters, Geneva, Switzerland**.

Dispute Settlement Mechanism

- WTO has a **clearly structured process** with clearly defined stages in the procedure for dispute settlement.
- It introduced greater discipline for the length of time a case should take to be settled, with flexible deadlines set in various stages of the procedure.
- Settling disputes is the responsibility of the **Dispute Settlement Body which consists of all WTO members**.
- It is the **General Council** that **convenes as the Dispute Settlement Body (DSB)** to deal with disputes between WTO members.
- The Dispute Settlement Body has the sole authority to establish “panels” of experts to consider the case, and to accept or reject the panels’ findings or the results of an appeal.

- It monitors the implementation of the rulings and recommendations, and has the power to authorize retaliation when a country does not comply with a ruling.

Appellate Body

- Each appeal is heard by three members of a **permanent seven-member Appellate Body**.
- Members of the Appellate Body have **four-year terms**.
- The appeal can uphold, modify or reverse the panel’s legal findings and conclusions. Normally appeals should not last more than 60 days, with an absolute maximum of 90 days.
- The Dispute Settlement Body has to accept or reject the appeals report within 30 days — and rejection is only possible by consensus.

Why in News?

- The U.S. has paralysed the World Trade Organization’s Appellate Body by **starving funds for its functioning**.

News in Detail

- The U.S. has also stalled the selection process for filling six vacancies at the Appellate Body.
- Consequently, the Appellate Body is left with only one member, who will not be able to deliver any rulings on pending trade disputes — **a minimum of three members is required to adjudicate any dispute**.

2) Iran launches missiles at US military facilities in Iraq

Background

- An Iranian-backed militia group attacked a US base near **Kirkuk**, Iraq, known as K1 (Dec 27, 2019).
- One American contractor was killed, and US military personnel were also wounded.
- The incident escalated and culminated into killing of a top Iranian commander in a US drone attack (refer *Officers’ Pulse Issue No. 30*).



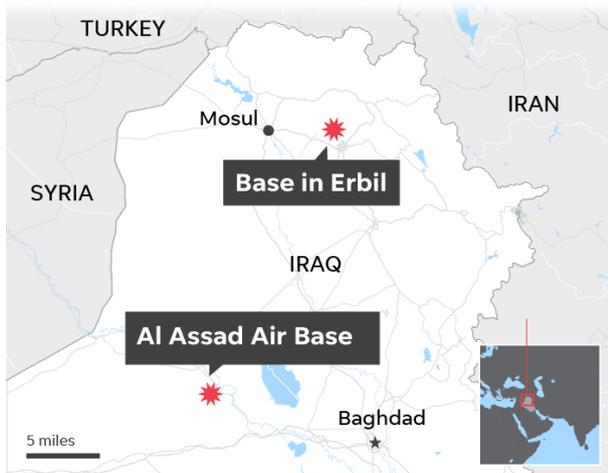
Why in News?

- Iran launched over a dozen missiles at **al-Asad** and **Erbil** military bases in Iraq that house U.S. troops in retaliation for the killing of top Iranian General Qassem Soleimani by the U.S.



1. Shahab 1 300km (range)	3. Shahab 2 500km	5. QIAM-1 800km	7. SEJJIL 2,000km
2. Fateh-110 300km	4. Zolfaghar 700km	6. Shahab 3/EMAD/GHADR 2,000km	8. Soumar (cruise missile) 2,500km

Missile attacks on bases housing US forces



Iranian Missile System

- The Iranian-designed and built **Fateh** and **Qiam** missiles were used in the retaliatory attacks on Iraq military bases housing US forces.

3) Exercise Sea Guardian

About Sea Guardian Exercise

- It is a bilateral naval exercise between **China** and **Pakistan**.
- The **sixth** bilateral naval exercise, Sea Guardians-2020, commenced in the northern **Arabian Sea**, with the purpose of enhancing security cooperation between the two countries.
- The two sides will pursue a number of training objectives, including joint patrol, air-defence, joint anti-submarine, maritime live-firing, and joint marine training.
- The two countries have also been conducting **warrior series** exercises between the two **ground forces** and the **eagle series** between their air forces.

- Exercise Guardian Sea** is a bilateral naval exercise between the **U.S. Navy** and **Thailand Navy**

Why in News?

- India has deployed its aircraft carrier **INS Vikramaditya** in the Arabian Sea at a time China and Pakistan are holding a nine-day mega naval exercise in the region, a move seen as New Delhi sending a clear signal to its two neighbours.

About INS Vikramaditya



- INS Vikramaditya is the Indian Navy's **largest short take-off, but assisted recovery (STOBAR) aircraft carrier** and **warship** converted from the **Russian Navy's** decommissioned **Admiral**

Gorshkov vertical take-off and landing (VTOL) missile cruiser carrier.

- INS Vikramaditya was commissioned into service in November **2013**.
- The vessel can carry **more than 30 long-range multi-role fighters** with anti-ship missiles, air-to-air missiles, guided bombs and rockets.
- The aircraft aboard the carrier include **MiG 29K / Sea Harrier** combat aircraft, **Kamov 31** radar picket Airborne Early Warning (AEW) helicopter, **Kamov 28** naval helicopter, **Sea King** helicopter, **ALH-Dhruv**, and **Chetak** helicopter.

4) Oman

Location



- Located on the **eastern edge of the Arabian Peninsula**, Oman occupies a **strategic position at the entrance to the Persian Gulf**.
- Oman is bordered by the countries of **Yemen, Saudi Arabia** and the **United Arab Emirates**, as well as the **Arabian Sea** and **Gulf of Oman**.

- **Tropic of Cancer** passes through the northern part of the country.
- **Muscat** is the capital city.

Geography



- The northernmost part of Oman, the **Musandam Peninsula**, is separated from the rest of the country by a strip of land belonging to the United Arab Emirates.
- Much of the country's interior falls within the sandy, treeless, and largely waterless region of the Arabian Peninsula known as the **Rub' al-Khali**.
- The region is still the domain of **Bedouin** nomads.
- There are no permanent bodies of freshwater in the country.

Why in News?

- Oman's Sultan Qaboos bin Said, one of the Middle East's longest-serving rulers who maintained the country's neutrality in a turbulent region, died recently.

Science and Technology

1) Challakere to be ISRO's Human Space Flight Centre (HSFC).

Why in News?

- India's **world-class facility for training astronauts** would come up in three years at **Challakere**, a shrubby, arid oilseeds town on the **Bengaluru-Pune NH4** in **Chitradurga district of Karnataka**.

About HSFC

- The Indian Space Research Organisation (ISRO) has proposed a Rs. 2,700-crore master plan to create top infrastructure that will house its young **Human Space Flight Centre (HSFC)**.
- Everything connected with events and planning of the HSP [Human Spaceflight Programme] would shift to Challakere centre.
- When ready, the 400-acre ISRO land at Challakere will be the **single-stop consolidating infrastructure and activities related to space travellers**.
- In future, whatever training and activities being done in Russia for the Gaganyaan crew can all be done here.
- Challakere will also host work related to crew and service modules of the spacecraft that carries the astronauts and up to mission control.
- Beyond that, the centre is tasked with pursuing future human space missions, complete mission planning, developing engineering systems for survival and safe return of the crew from space, as well as selecting and training the astronauts.
- The HSFC was formally announced in January 2019 and works from a temporary place at the ISRO headquarters, **Antariksh Bhavan**.
- The centre may take 2-3 years at the earliest to be set up, but would come up after the first Indian crewed flight.

Current scenario

- The country pays a hefty, unnamed sum to use such facilities abroad.
- The first set of four astronaut candidates for the first Gaganyaan mission of 2022 are to train in Russia.

- Currently, HSP work is split across various centres such as the Vikram Sarabhai Space Centre in Thiruvananthapuram and the U.R. Rao Satellite Centre in Bengaluru.
- The **Institute of Aerospace Medicine of the Air Force** has been roped in for their selection, basic and final training in Bengaluru.

Four candidates for Gaganyaan

- Four male pilots of the Indian Air Force in their 30s and early 40s are scheduled to leave for Moscow in the third week of January to train at the **Yuri Gagarin Cosmonaut Training Centre** for 15 months as candidates for Gaganyaan.
- They were selected through basic fitness and health tests at the IAF's Institute of Aerospace Medicine in Bengaluru.
- In Moscow, they will learn the skills of life and survival in a narrow capsule, before, during and after travelling away from earth's gravity while managing the travel around earth.
- For more details about Gaganyaan Mission, refer *Officers' Pulse Issue No. 30*.

More for Gaganyaan

- The ISRO also planned to add a quarantine facility at the second launch pad (SLP) in the Sriharikota space port.
- It would ensure that astronauts who were about to enter the spacecraft before the launch stay unexposed to pathogens.
- Among many human-rated projects, the SLP and the launch vehicle GSLV-MkIII will also be modified suitably for crew safety and comfort.

The Science City

- Challakere, about 400 km from Bengaluru, is also where premier scientific establishments have set up adjoining and interactive campuses on some 10,000 acres.
- Called the Science City, it houses facilities of the ISRO, the Defence Research & Development Organisation's **Advanced Aeronautical Test Range**, the Bhabha Atomic Research Centre and the Indian Institute of Science.

2) Scientific Social Responsibility (SSR)

About SSR

- Under the Scientific Social Responsibility programme, **researchers** who are working on a science project funded by any of the Ministries under the Central government **will have to undertake activities to popularise science** and make it more accessible to the public.
- The Government would draw up a list of activities that could be taken up under the programme that was **similar to Corporate Social Responsibility**.
- This could range from going to colleges delivering lectures, writing an article in a magazine or doing something beyond the curriculum.
- The science outreach **would be mandatory** and researchers had to include this as part of their outcome report.
- The move would not only **bridge the gap between research institutes and the civilians**, but also help scientists hone their communication skills.
- It will be implemented this year after a consultation meeting with all stakeholders.

Why in News?

- The Centre's policy on implementing scientific social responsibility (SSR) was discussed on the third day of the **107th Indian Science Congress**.
- For more details about 107th Indian Science Congress, refer *Officers' Pulse Issue No. 30*.

3) Army to sign MoU for AK-203 assault rifles in a month

Why in News?

- The Army is likely to sign a Memorandum of Understanding (MoU) in a month for the procurement of over 7.5 lakh AK-203 assault rifles, which are to be manufactured locally by an India-Russia joint venture (JV).

About the JV

- The rifles will be manufactured by the **Indo-Russian Rifles Private Limited (IRRPL)** at **Korwa** in Uttar Pradesh.
- The facility is being set up between the **Ordnance Factories Board (OFB)** from the Indian side, and **Rosoboron Exports** and **Kalashnikov** on the Russian side.
- The OFB owns 50.5% equity and Russian side holds the remaining 49.5%.

- The JV was formed following the Inter-governmental Agreement between India and Russia in February 2019.

Other small arms

- The Army recently began inducting the first batch of 10,000 **SIG-716 assault rifles**.
- The rifles are being procured under a contract signed in February 2019 with **Sig Sauer of the U.S.** for 72,400 SIG-716 assault rifles worth over Rs. 700 crore.
- The initial idea was to equip the entire Army with the SIG-716.
- Given the huge cost, it was decided that the rifles would be provided to frontline troops, while the remaining forces can be equipped with AK-203 rifles.

Replacing INSAS

- The Army has been looking to replace the indigenous **INSAS (Indian National Small Arms System) rifles** in use with a modern rifle.
- The MoD had approved the procurement in January 2018 through the **Fast Track Procurement route**.
- Of the 72,400 rifles, 66,400 are for the Army, 2,000 for the Navy and 4,000 for the Air Force.
- The entire quantity is expected to be delivered within 12 months from the date of signing the contract.

How good are AK-203?



- The AK-203, a **7.62x39mm** export variant of **Kalashnikov** new **AK-12**, boasts across-the-board performance improvements as compared with its INSAS counterpart.
- The AK-203 rectifies the infamous jamming and temperature operability problems plaguing the INSAS rifle.
- It has lighter weight, shorter length, and modern assault rifle ergonomics.

- **Ergonomics** is the process of designing or arranging workplaces, products and systems so that they **fit the people who use them**.

About SIG-716



- The SIG716 assault rifles uses the more powerful **7.62x51mm cartridge** which will replace the Indian-made 5.56x45mm INSAS rifles.
- The rifles are being supplied by US arms maker **Sig Sauer**.
- They **will be manufactured in the US** and will be supplied within a year since the contract for the new guns is being made under fast-track procurement (FTP).
- A majority of these rifles -- 66,000 -- are for the Indian Army.
- The remaining will be divided between the Indian Navy (2,000) and the Indian Air Force (4,000).

About INSAS



- In the 1980s, the Indian defense network developed a new assault weapon series to be known collectively as the "**INDian Small Arms System**" - or "INSAS".
- The design was **influenced by the Soviet-era Kalashnikov AK-47** pattern and was similarly of gas-operation with a rotating bolt.
- The INSAS family was inducted into service with the Indian Army in 1998.
- While the design of the INSAS was handled by **Armament Research & Development Establishment (ARDE)**, manufacture is headed by the **Indian State Ordnance Factory Board**.
- The INSAS is the current standard issue assault rifle of the Indian Army and has
- also been purchased for use by the military forces of Bhutan, Nepal and Oman.

4) National Aerospace Laboratory wants govt. push for Saras Mk2 takeoff

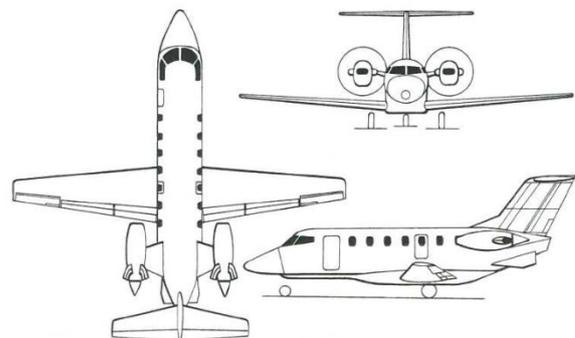
About NAL SARAS



- The SARAS is the **first indigenous light transport aircraft** developed by the **National Aeronautics Laboratories (NAL)**, which is overseen by the **Council of Scientific & Industrial Research (CSIR)**.
- The Saras Mk2 is a **19-seater aircraft**, developed with a target cost of Rs. 50 crore.
- The aircraft will soon be certified for **both civil and military use**.
- It can be used for transporting civilians, freight, and in remote sensing exercises.
- The aircraft was designed to operate and manoeuvre at **high altitudes** and **under extreme temperatures**.
- The aircraft has been designed to travel at **425 km/h** and it has a **maximum continuous flight time of around five hours**.

Advantages

- It is **at least 20-25% lower** in cost than other aircraft in the similar category.
- The plane is capable of executing both day and night missions.
- It can take off and land from semi-prepared airfields and even on grass runways.
- It has unique features like high cruise speed, lower fuel consumption, short landing and take-off distance and low cabin noise.



Background

- The aircraft has been in the making since 1991.
- The first prototype flew in 2004.
- But without the initial push from the government, the manufacturing capacity

required for commercial production could not be set up.

- Production is expected to start in 2022.

Why in News?

- The **NAL** has told the Parliamentary Standing Committee on Science and Technology that the government needs to be the “launch customer” to make Saras Mk2 commercially viable.
- The NAL has been pitching SARAS Mk-2 for the government’s **UDAN (Ude Desh Ka Aam Nagrik)**, since it has the **capacity to operate in “ill-equipped”, “semi-prepared” and “unpaved airstrips”**.

5) Indian Data Relay Satellite System (IDRSS)

Why in News?

- India plans to ring in its own era of **space-to-space tracking and communication of its space assets** this year by putting up a **new satellite series** called the Indian Data Relay Satellite System.

About

- The IDRSS is planned to track and be constantly in touch with Indian satellites, in particular those in low-earth orbits (LEO) which have limited coverage of earth.
- In the coming years, it will be vital to Indian Space Research Organisation (ISRO), whose roadmap is dotted with advanced LEO missions such as space docking, space station, as well as distant expeditions to the moon, Mars and Venus.
- It will also be useful in monitoring launches.
- The first beneficiary would be the prospective crew members of the Gaganyaan mission of 2022 who can be fully and continuously in touch with mission control throughout their travel.
- IDRSS satellites of the 2,000 kg class would be launched on the GSLV to geostationary orbits (GEO) around 36,000 km away.
- A satellite in GEO covers a third of the earth below and three of them can provide total coverage.

- Older space majors such as the U.S. and Russia started their relay satellite systems in the late 1970s-80s and a few already have around 10 satellites each.
- They have used them to monitor their respective space stations **Mir** and the **International Space Station**, and trips

that dock with them, as well as the Hubble Space Telescope.

Work initiated

- Work on the **two IDRSS satellites planned initially** has begun.
- The first of them will be sent towards the end of 2020.
- It will **precede the pre-Gaganyaan experimental unmanned space flight** which will have a humanoid dummy.
- A second one will follow in 2021.
- The two will offer near total tracking, sending and receiving of information from the crew 24/7.

Need for IDRSS

- During the launch of the human mission and also when the crew craft orbits earth from a distance of 400 km, at least one ground station must see and track it.
- But with available ground stations, that would not be possible.
- Without data relay satellites, ISRO would have to create a large number of ground stations everywhere or hire them globally and yet the crewed spacecraft would not be visible all the time.

- The **U.S.** is putting up its **third-generation** advanced fleet of **TDRS (Tracking & Data Relay Satellites)**.
- **Russia** has **Satellite Data Relay Network**.
- **Europe** is building its own **European Data Relay System**.
- **China** is into its **second generation Tianlian II series**.

6) Genome of Indian cobra sequenced

Why in News?

- A consortium of scientists, including some from India, has mapped the genome of the Indian Cobra, among the most poisonous snakes in the country.

Need for genome sequencing of snakes

- Knowing the sequence of genes could aid in **understanding the chemical constituents of the venom** and **contribute to the development of new anti-venom therapies**, which have remained practically unchanged for over a century.
- High-quality genomes of venomous snakes will enable generation of a comprehensive

catalogue of venom-gland-specific toxin genes.

- Knowing these genes can help scientists design new antivenom using **recombinant protein technologies**.
- If genomes of more snakes are sequenced, there is a bigger possibility of genes commonly associated with venom production (across snake species) are identified and more broad-spectrum antivenoms are made.

- **Recombinant DNA technology** is the **joining together of DNA molecules from two different species**.
- The recombinant DNA molecule is inserted into a host organism to produce new genetic combinations that are of value to science, medicine, agriculture, and industry.
- **Recombinant protein** is a manipulated form of protein, which is generated in various ways to produce large quantities of proteins, modify gene sequences and manufacture useful commercial products.

Existing process

- Currently, anti-venom is produced by immunising horses with extracted snake venom and is based on a process developed more than 100 years ago.
- This process is laborious and suffers from a lack of consistency leading to varying efficacy and serious side effects.

Snake bite data

- Every year, approximately five million people worldwide are bitten by venomous snakes resulting in about 400,000 amputations and more than 100,000 deaths.
- Each year, about 46,000 people die and 140,000 people are disabled in India from snakebites by the '**Big 4**' — **the Indian cobra, the common krait, Russell's viper and the saw-scaled viper**.

Beyond 'Big 4'

- Sequencing a genome is an important step to making anti-venom but wouldn't on its own solve the problem of making and

supplying enough of the product to address the huge volume — and variety — of snakebites in India, according to independent scientists.

- Though bites from 60 of 270 species of Indian snakes are known to kill or maim, anti-venom now available is only effective against the 'Big 4.'
- This implies we need new kinds of anti-venom against other species.
- The **Sind krait** from western India is over 40 times more potent than that of the Spectacled cobra, making it the most toxic Indian snake. Unfortunately, the polyvalent anti-venom fails to effectively neutralise the venom of this species as well.

7) Indian Cyber Crime Coordination Centre (I4C)

Why in News?

- Union Home Minister Amit Shah inaugurated the Indian Cyber Crime Coordination Centre (I4C) recently.

About I4C

- The I4C is a **seven-pronged system**, which includes a cybercrime reporting portal, analysis of threats, capacity building, research and innovation, creating an ecosystem for cybercrime management and a joint cybercrime investigation platform for law enforcement agencies.
- The project was approved in October 2018 at an estimated cost of Rs. 415.86 crore.

National Cyber Crime Reporting Portal

- On August 30, the MHA had unveiled its National Cyber Crime Reporting Portal.
- Citizens can report any kind of cyber crime irrespective of the place where it has occurred through this portal.
- The portal enables filing of all cybercrimes with specific focus on crimes against women, children, particularly child pornography, child sex abuse material, online content pertaining to rapes/gang rapes.
- So far, more than 700 police districts and more than 3,900 police stations have been connected with this portal.

1) Bureau of Energy Efficiency (BEE)

About BEE:

- BEE is a **statutory body** under the **Ministry of Power**, Government of India.
- It is assisted in developing policies and strategies with the primary objective of **reducing the energy intensity of the Indian economy**.
- BEE coordinates with designated consumers, designated agencies, and other organizations to identify and utilize the existing resources and infrastructure, in performing the functions assigned to it under the Energy Conservation Act, 2001.

Major functions of BEE include:

- Create awareness and disseminate information on energy efficiency and conservation.
- Promote use of energy efficient processes, equipment, devices and systems
- Give financial assistance to institutions for promoting efficient use of energy and its conservation
- Prepare educational curriculum on efficient use of energy and its conservation
- Implement international co-operation programmes relating to efficient use of energy and its conservation.

About BEE Star Rating

- Star ratings are provided to all the major kind of appliances in the form of labels. These star ratings are given out of 5 and they provide a basic sense of how energy efficient each product is, just in a single glance.



- The manufacturers are officially required to put these labels as per the Standards and Labelling Program introduced in 2006.
- Appliances which need to have an energy rating label mandatorily are Frost-free refrigerator, Tubular Fluorescent Lamps, Room Air-Conditioners, Distribution Transformer, Colour TV, CST AC, Direct Cool Refrigerator and Electric Geyser.
- The appliances with the lowest energy consumption in a product category are given the most stars and those with the highest energy consumption are given the least.

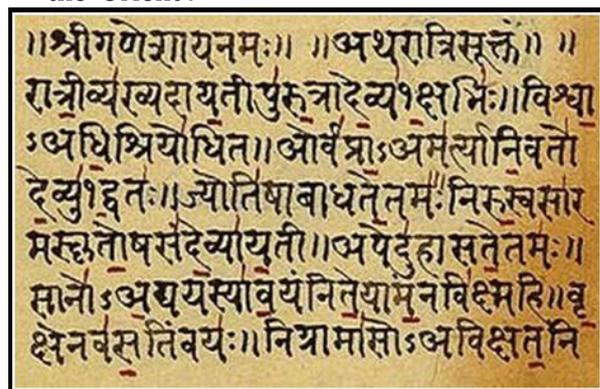
Why in News?

- The Central Government in consultation with the Bureau of Energy Efficiency (BEE) has notified new energy performance standards for Room Air Conditioner (RACs).
- The **24 degree Celsius** default setting has been made **mandatory from Jan 1, 2020 for all room air conditioners** covered under the **ambit of BEE star-labelling program**.

2) All India Oriental Conference

What is Oriology?

- Oriology is the study of the indigenous lore (*traditional knowledge and stories about a subject*) and wisdom of the ancient East or the 'Orient'.



About:

- The All India Oriental Conference (AIOC) was founded in 1918 by the founders of the Bhandarkar Oriental Research Institute (BORI) with a pan Indian dialogue of Indological scholars in view.
- The AIOC is a biennial Conference.

- The sessions have taken their occasions in all parts and in the cities most renowned as the centres for Sanskrit studies and Oriental Study in general, in India.

About Bhandarkar Oriental Research Institute (BORI):

- The Bhandarkar Oriental Research Institute, Pune, was founded in 1917 in the honour of the work of Ramakrishna Gopal Bhandarkar, the foremost pioneer of scientific Orientology in India.
- The Institute is a public organization registered under Societies Registration Act 1860 and Bombay Public Trusts Act 1950.

Why in News?

- The Vice President of India, Shri M Venkaiah Naidu inaugurated the 50th session of All India Oriental Conference in Nagpur.

3) Fast Track Special Courts

Why in News?

- The Law Ministry has said that over 1000 Fast Track Special Courts will be set up across the country for speedy disposal of cases relating to rape and Protection of Children from Sexual Offences (POCSO) Act.

About:

- Out of these, 389 courts have been proposed to be set up exclusively for POCSO Act related cases in districts where the pendency of such cases is more than 100.
- These courts will be set-up as a part of the **National Mission for Safety of Women**. The scheme was circulated to the concerned State Governments and Union Territory Administrations in September last year.
- The Ministry said, 24 States and Union Territories have joined this scheme for setting up 792 Fast Track Special Courts. These include 354 exclusive courts for trial of POCSO offences.
- Incidents of rape and gang rape of minor girls below twelve years and similar heinous crimes against women require effective deterrence through time-bound trial. For this purpose, the Centre has enacted the Criminal Law (Amendment) Act, 2018.

4) MILAN 2020

- **About MILAN 2020:**
- MILAN stands for Multilateral Naval Exercise. It is a multilateral naval exercise aimed to enhance professional interaction

between friendly foreign navies and learn from each other's strengths and best practices in the maritime domain.

- The Exercise with the theme '**Synergy Across the Seas**' would provide an excellent opportunity for Operational Commanders of friendly foreign navies to interact with each other in areas of mutual interest.
- Of the 41 navies invited, confirmations from over 30 navies have been received towards their participation in MILAN 2020.
- The event consists of a sea phase and a harbour phase.

Why in News?

- The City of Destiny, Visakhapatnam, is gearing up to host an international naval event titled 'MILAN' in March 2020.

5) National Youth Festival(NYF)

About:

- The Government has been organizing National Youth Festival (NYF) since 1995.
- The objective of NYF is to provide a platform to bring the youth of the country together in an attempt to provide them the opportunity to showcase their talents in various activities.
- It also provides an arena, by creating a mini-India, where youth can interact in formal and informal settings and exchange their social and cultural uniqueness.
- The theme of the 23rd National Youth Festival 2020 is '**Fit Youth Fit India**' in pursuance of the goal of Prime Minister for New India to be a fit India.
- NYF 2020 would leverage on the knowledge and ideas that Youth of today bring to the table where they are hugely connected and integrated through online and offline communication channels than ever before.
- The NYF 2020 intends to focus on bringing the attention of the Youth towards dialogue and discussions on selected thematic interfaces so that the outcome feeds into a National Level.

Why in News?

- Ministry of Youth Affairs and Sports and State Government of Uttar Pradesh are jointly organizing 23rd National Youth Festival (NYF) 2020.

6) National Stock Exchange (NSE) Knowledge Hub

About the NSE Knowledge Hub:

- It is an **Artificial Intelligence (AI) powered learning ecosystem** that will assist the banking, financial services and insurance (BFSI) sector.
- The NSE Knowledge Hub will enhance skills and help academic institutions in preparing future-ready talent for the financial service industry.
- It is created by the **National Stock Exchange**. The NSE is the leading stock exchange in India and the second largest in the world by the number of trades in equity shares from January to June 2018.

About National Stock Exchange

- It launched electronic screen-based trading in 1994, derivatives trading (in the form of

index futures) and internet trading in 2000, which were each the first of its kind in India.

- NSE was the first exchange in the country to provide a modern, fully automated screen-based electronic trading system which offered easy trading facility to the investors spread across the length and breadth of the country.
- It offers trading and investment in the following segments: equity, derivatives, debt, equity derivatives, interest rate futures and debt market.

Why in News?

- The Union Commerce and Industry Minister inaugurated NSE Knowledge Hub in New Delhi.

News in Depth

AIR NEWS

1) Pravasi Bhartiya Diwas

About PBD:

- Pravasi Bharatiya Divas (PBD) is celebrated on 9th January every year to mark the contribution of Overseas Indian community in the development of India.
- Pravasi Bharatiya Divas (PBD) Convention is celebrated once in every two years to strengthen the engagement of the overseas Indian community with the Government of India and reconnect them with their roots.

Pravasi Bharatiya Samman Award

- The Pravasi Bharatiya Samman Award (PBSA) is the highest honour conferred on overseas Indians. PBSA is conferred by the President of India as a part of the Pravasi Bharatiya Divas (PBD) Conventions organized since 2003 on a Non-Resident Indian, Person of Indian Origin or an organization or institution established and run by the Non-Resident Indians or Persons of Indian Origin, who has made significant contribution.

Why in News?

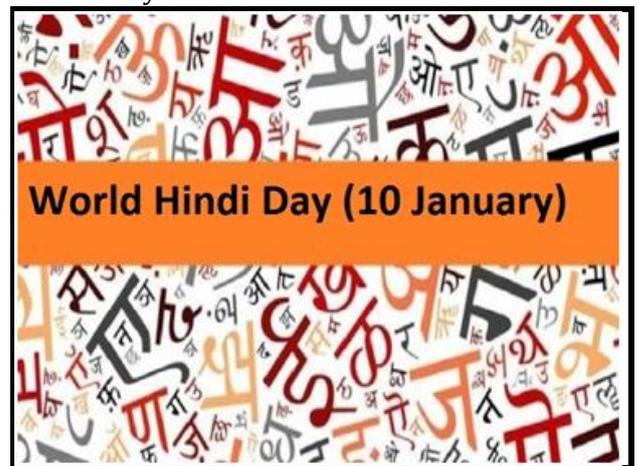
- Indian embassies in different countries celebrate Pravasi Bhartiya Diwas on **January 9**. This date was chosen as the day to celebrate this occasion since it was on this day in 1915 that **Mahatma Gandhi returned to India from South Africa**, led India's freedom struggle and changed the lives of Indians forever.

2) World Hindi Day

About:

- The day is commemorated every year with the objective to promote use of Hindi language abroad.
- It was **first celebrated in 2006** to commemorate the **anniversary of the first World Hindi Conference** which was held in Nagpur on January 10, 1975.

- Ministry of External Affairs and Indian Missions abroad are observing the day annually.



Why in News?

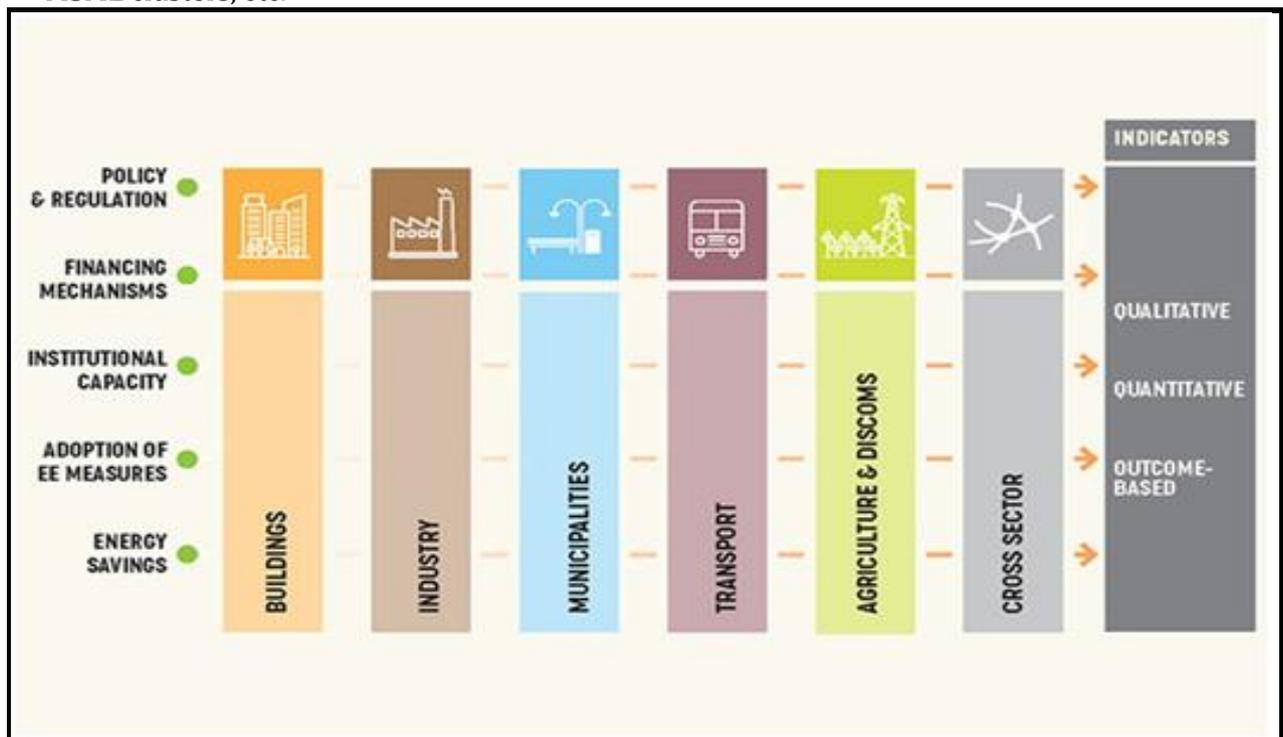
- World Hindi Day is being celebrated on January 10.

3) State Energy Efficiency Index 2019

About:

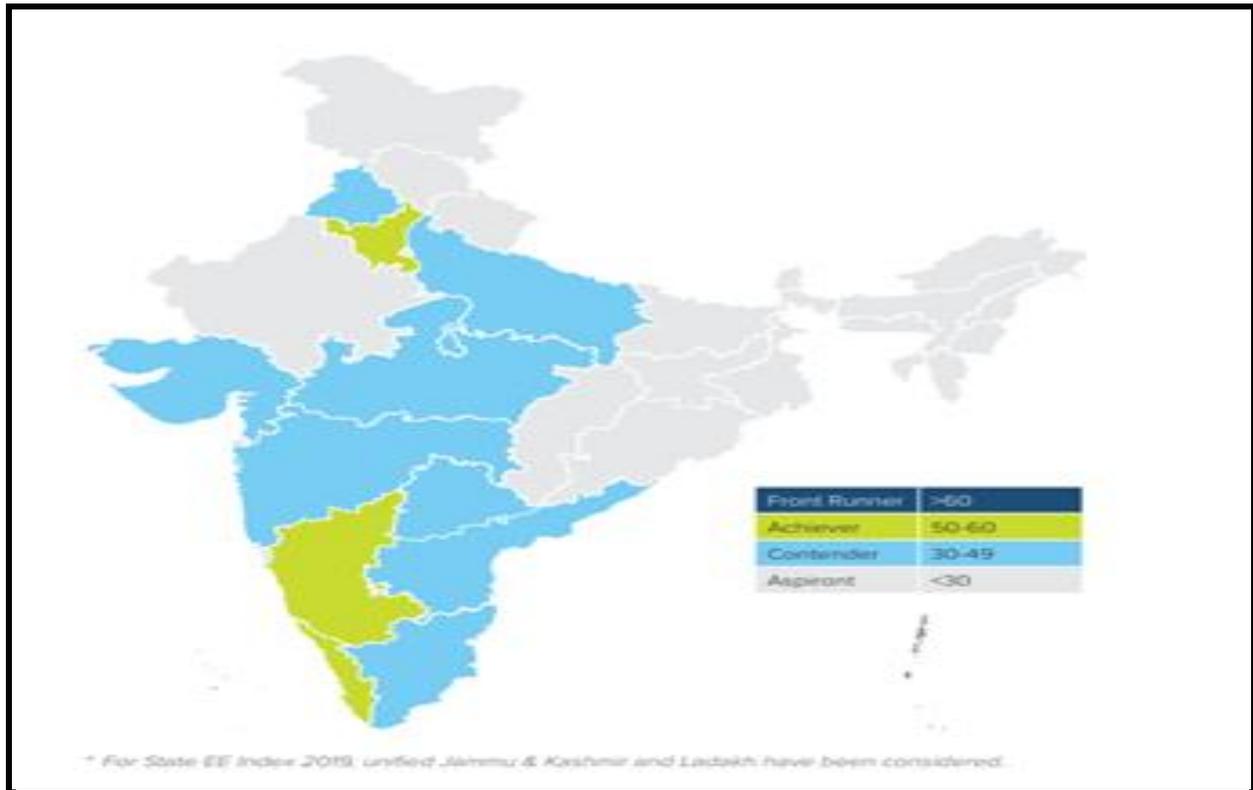
- The index tracks the progress of Energy Efficiency initiatives in 36 States and Union Territories based on 97 significant indicators.
- The index is developed by the **Bureau of Energy Efficiency (BEE)** in association with Alliance for an Energy Efficient Economy (AEEE).
- The first such Index was launched on August, 2018. The index this year incorporates **qualitative, quantitative and outcome-based indicators** to assess energy efficiency initiatives, programs and outcomes in five distinct sectors – buildings, industry, municipalities, transport, agriculture, and DISCOMs.
- New indicators for this year include adoption of Energy Conservation Building

Code (ECBC) 2017, energy efficiency in MSME clusters, etc.



Highlights:

- For rational comparison, States/UTs are categorised as **'Front Runner'**, **'Achiever'**, **'Contender'** and **'Aspirant'** based on aggregated Total Primary Energy Supply (TPES) required to meet the state's actual energy demand (electricity, coal, oil, gas, etc.) across sectors.
- The top-performing states for 2019 are Haryana, Kerala and Karnataka, are in the **'Achiever'** category.
- Manipur, Jammu & Kashmir, Jharkhand and Rajasthan performed the worst in the **Aspirant groups**.
- **There isn't any state in 'frontrunner' state.**



Why in News?

- Union Government released the State Energy Efficiency Index 2019.

4) New Wetland Conservation Rules

What is a wetland?

- A wetland is a land area that is saturated with water, either permanently or seasonally, and it takes on the characteristics of a distinct ecosystem.



Salient features of the rules:

- The rules prohibit setting up or expansion of industries and disposal of construction and demolition waste within the wetlands.
- Each state and Union Territory will have to set up an authority that will define strategies for conservation and wise use of wetlands within their jurisdiction.
- The Authority will prepare a list of all wetlands of the State or UT within three months from the date of publication of these rules.
- It will develop a comprehensive list of activities to be regulated and permitted within the notified wetlands and their zone of influence.
- It will also recommend mechanisms for maintenance of ecological character through promotional activities for land within the boundary of notified wetlands.
- The Ministry has also created a web portal for sharing information regarding the implementation of Wetlands Rules where the central government, state governments are required to upload all relevant information and documents pertaining to wetlands in their jurisdiction.

Why in News?

- Ministry of Environment has notified the new Wetland Conservation Rules.

Hindu Editorial Analysis

1) Taking a holistic approach to dengue

Context:

- The advent of a new tetravalent vaccine against dengue virus has thrown new light into the evidence-based management of dengue.

About Dengue:

- Dengue is **fast emerging pandemic-prone** viral disease in many parts of the world.

Cause

- The dengue virus – a **flavivirus** of which there are four serotypes.

Transmission

- Dengue is transmitted principally by the **Aedes aegypti mosquito**, which bites during daylight hours.
- There is no direct person-to-person transmission.
- Monkeys act as a reservoir host in west Africa and south-east Asia.

Nature of the disease

- Dengue occurs in three main clinical forms:
- Dengue fever is an acute febrile illness with sudden onset of fever, followed by development of generalized symptoms and sometimes a macular skin rash.
- It is known as “**breakbone fever**” because of severe muscle, joint and bone pains. Pain behind the eyes (retro-orbital pain) may be present. The fever may be biphasic (i.e. two separate episodes or waves of fever). Most patients recover after a few days.
- Dengue haemorrhagic fever has an acute onset of fever followed by other symptoms resulting from thrombocytopenia, increased vascular permeability and haemorrhagic manifestations.
- Dengue shock syndrome supervenes in a small proportion of cases. Severe hypotension develops, requiring urgent medical treatment to correct hypovolaemia. Without appropriate hospital care, 40–50% of cases can be fatal; with timely medical care by experienced physicians and nurses the mortality rate can be decreased to 1% or less.

Geographical distribution

- Dengue is widespread in tropical and subtropical regions of central and South America and south and south-east Asia. It also occurs in Africa and Oceania. (Map). The risk is lower at altitudes above 1000 m.

Risk for travellers

- In countries or areas at risk and affected by epidemics.

Prophylaxis

- There are no specific vaccines or antiviral treatments against dengue fever until the discovery of the new tetravalent vaccine. Use of paracetamol to bring down the fever is indicated. Aspirin and related non-steroidal anti-inflammatory drugs (NSAIs) such as ibuprofen should be avoided.

Reasons for increase in number of dengue cases:

- Underreported cases due to political reasons and also to avoid spreading panic among the common people.
- There is a lack of coordination between the local bodies and health departments in the delivery of public health measures.
- Lack of comprehensive mechanism required to address the issues
- Less availability of skilled workers in the field of public health.

Measures to be taken:

- Source reduction activities can be undertaken, including **preventing water stagnation** and using chemical larvicides and adulticides.
- These chemicals need to be applied in periodic cycles to kill the larvae that remain even after the first spray.
- Usage of Epidemiological measures in the management of dengue. Eg: Singapore uses one successful model of mapping and analysing data on dengue, using Geographical Information System (GIS). This involves mapping the streets with dengue cases for vector densities.
- Coagulation abnormalities are not due to a reduction in the number of platelets alone. This is why the WHO recommends fresh whole blood or packed cell transfusion in the event of bleeding instead of platelet transfusion.

- Usage of complementary medicines like **Nilavembu kudineer** (a Siddha medicine) and **papaya leaf extract** should be controlled which are now widely promoted for use to treat dengue fever despite the safety of and complex interactions among its different constituents not having been tested.

2) A health emergency: On risk of international spread of poliovirus

- **Context:**
- The **World Health Organization** announced recently that polio will continue to remain a **Public Health Emergency of International Concern (PHEIC)** for three months based on the risk of international spread of poliovirus.

About Polio:

▪ Refer Pulse 21 Editorial section

- **About Public Health Emergency of International Concern (PHEIC):**
- The term Public Health Emergency of International Concern is defined in the International Health Regulations, 2005 (IHR) as “**an extraordinary event** which is determined, as provided in these Regulations:
- to **constitute a public health risk** to other States through the international spread of disease; and
- to **potentially require a coordinated international response**”.
- This definition implies a situation that: is serious, unusual or unexpected; carries implications for public health beyond the affected State’s national border; and may require immediate international action.
- The responsibility of determining whether an event is within this category lies with the **WHO Director-General** and requires the convening of a committee of experts – the **IHR Emergency Committee**.
- **Composition of the committee:**
- WHO maintains an IHR roster of experts and the members of an IHR Emergency Committee are selected from this roster and/or WHO expert advisory panels and committees.
- At least one member of the Emergency Committee should be an expert nominated by a State Party within whose territory the event arises.

▪ **Role of IHR Emergency Committee:**

- This committee advises the Director General on the recommended measures to be promulgated on an emergency basis, known as temporary recommendations.
- Temporary recommendations include health measures to be implemented by the State Party experiencing the PHEIC, or by other States Parties, to prevent or reduce the international spread of disease and avoid unnecessary interference with international traffic.
- The Emergency Committee also gives advice on the determination of the event as a PHEIC in circumstances where there is inconsistency in the assessment of the event between the Director-General and the affected country/countries.
- The Emergency Committee continues to provide advice to the Director-General throughout the duration of the PHEIC, including any necessary changes to the recommended measures and on the determination of PHEIC termination.

Reasons to continue Polio under PHEIC:

- This decision based on the “**rising risk**” of **international spread of wild poliovirus type-1**.
- Polio was declared as PHEIC in 2014 and has continued to remain since then.

Distribution of Wild poliovirus type-1

- There were 156 cases of wild polio type-1 cases in 2019 compared with 28 in 2018.
- With two of the three wild polioviruses eliminated, only type 1 wild poliovirus is still in circulation and is restricted to just two countries — Afghanistan and Pakistan.
- With 128 cases, Pakistan accounted for the most number of cases, while Afghanistan reported 28 cases.

Why Pakistan and Afghanistan?

- **Spreads from one country to another**
- Instances of the wild type-1 virus getting exported from Pakistan to Iran and Afghanistan, as also on the spread from Afghanistan to Pakistan.
- **Unvaccinated Population**
- The number of children not vaccinated in Afghanistan has been increasing.

- In 2018, a total of 8,60,000 children in Afghanistan did not receive polio vaccine due to security threats.
- The situation did not improve in 2019 and, as a result, a large cohort of children in the southern region of the country remains unprotected.
- Therefore, even other parts of the country that have been free of the virus in the past are at risk of outbreaks.

Vaccine derived Poliovirus

- Outbreak of vaccine-derived poliovirus cases has been reported in 16 countries which accounts 249 vaccine-derived poliovirus cases in 2019.
- The rapid emergence of multiple circulating vaccine-derived poliovirus type-2 strains in several countries is unprecedented and very concerning, and not yet fully understood.

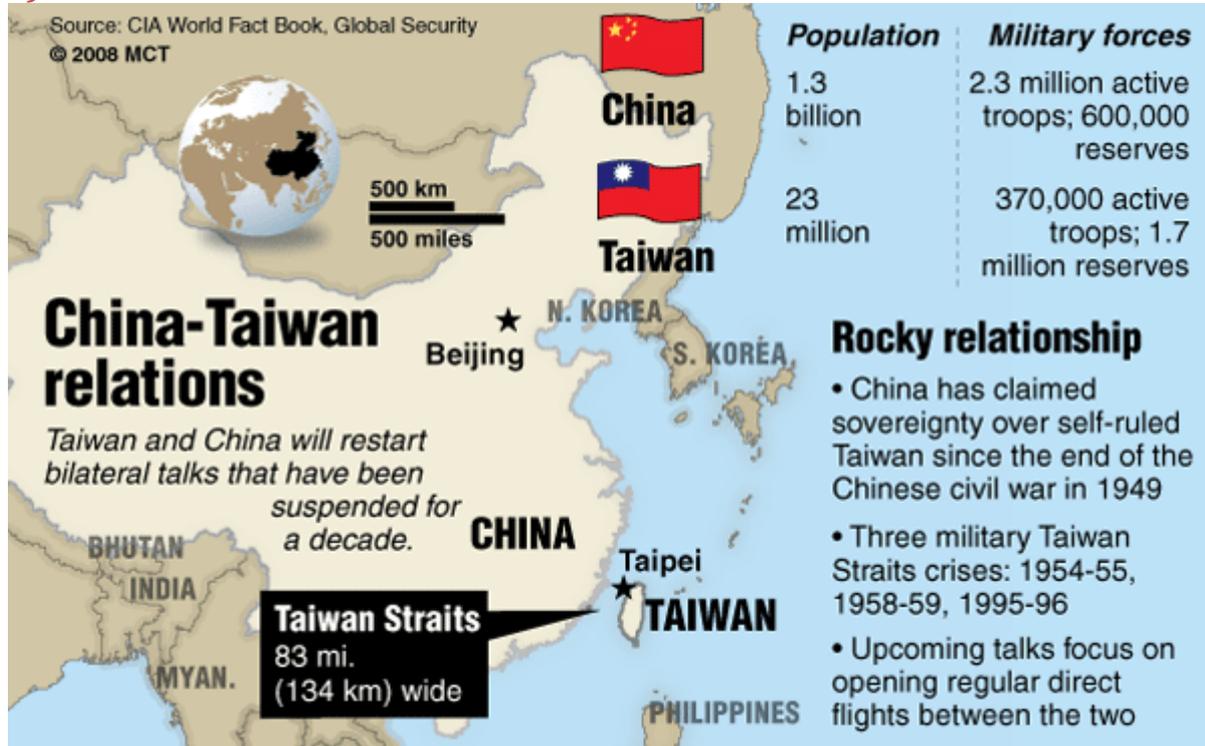
- Not a single case of vaccine-derived poliovirus was reported from Afghanistan, while Pakistan had just 12 cases.

About Polio eradication:

- A country is said to have eradicated polio when no new case of wild poliovirus is reported for three successive years.
- While Nigeria reported 18 cases of vaccine-derived poliovirus, not a single case of wild poliovirus type-1 has been reported from the country for over three years; the last reported case was in August 2016.
- Nigeria is set to be declared as having eradicated polio this year, and in turn, the entire African region will become free of wild poliovirus.

RSTV Big Picture

1) China vs Taiwan



Why in news?

- Taiwan has rejected the Chinese formula of one country two systems.
- In her New Year speech Taiwanese President vowed to defend the island nation's sovereignty saying the Hong Kong model would not work for Taiwan as democracy and authoritarianism can not coexist in the same country.

What is the background?

- China claims Taiwan as its territory and wants to bring it under Beijing's control even if it requires the use of force.
- The anti Infiltration bill passed by Taiwanese Parliament recently has further sent the relations between the two to a new low.

What is the history of the relationship between China and Taiwan?

- Taiwan's official name is the "Republic of China" (ROC).
- It traces its founding to 1911 on the Chinese mainland after the collapse of China's last imperial dynasty.
- The Nationalist Party, or Kuomintang (KMT), ruled China until 1949 when it was

defeated by the army of the Chinese Communist Party of China in a bloody civil war and fled to Taiwan.

- Taiwan is an island off the southeastern coast of mainland China.
- Later that same year, Communist leader Mao Zedong declared the birth of the People's Republic of China (PRC) from Tiananmen Gate in Beijing.
- The two sides have been governed separately since, though a shared cultural and linguistic heritage mostly endures with Mandarin spoken as the official language in both places.
- Taiwan, with a population of more than 23 million people, has become a vibrant democracy since the 1990s with the KMT and the opposition Democratic Progressive Party (DPP) trading victories in presidential elections.

What do we understand by 'One China Policy'?

- The One-China policy refers to the policy or view that there is only one state called "China", despite the existence of two governments that claim to be "China".

- As a policy, this means that countries seeking diplomatic relations with the People's Republic of China (PRC, Mainland China) must break official relations with the Republic of China (ROC, Taiwan) and vice versa.
- It is the diplomatic acknowledgement of China's position that there is only one Chinese government.
- Under the policy, China sees Taiwan as a breakaway province to be reunified with the mainland.
- In 1979, the US acknowledged the People's Republic of China's claim that there is one China and that Taiwan is part of China, when Washington severed ties with Taipei to recognize Beijing.

What are the traces of origins of Taiwan?

- Austronesian tribal people who came from the modern southern China were the first non settlers in Taiwan.
- China was a Dutch colony from 1624 to 1661.
- Taiwan was ruled by China from 1683 to 1895.
- In the 17th century, migrants arrived from China into Taiwan.
- A large proportion of the population has their trails into the China in Taiwan.
- Japan won the first Sino-Japanese war in 1895 and in the aftermath of the war, China ceded Taiwan to Japan.
- After WW2, Japan surrendered Taiwan to China back.
- The Kuomintang government in China was beaten back by the communist armies under Mao-Zedong and they fled to Taiwan in 1949.

What is the role played by US?

- US ended diplomatic relations with Taiwan in the path of improving relations with China in 1979.
- Taiwan Relations Act was revoked by USA and promised Taiwan to supply weapons.
- This act stressed that any attack by China on Taiwan will be near attack over the USA.
- Taiwan Travel Act helped in greater engagement between Taiwan and USA.
- The ongoing trade war between China and USA engagement between Taiwan and USA.

What is India's stand?

- India has accepted the "One China" policy that accepts Taiwan and Tibet as part of China since 1949.

- India uses the policy to make a diplomatic point, i.e., if India believes in "One China" policy, China should also believe in a "One India" policy.

Conclusion

- The diplomatic shift of USA to influence Taiwan has miffed China and with China's pressure many African and Central American countries have withdrawn relations with Taiwan. Taiwan wants to maintain a status quo with China, not to seek independence from China and in a recent referendum, Taiwan rejected a proposal to rename the olympics' team as Taiwan as current Taipei.

2) The Extremist Threat

Why in news?

- Uttar Pradesh State govt has written to the Union Home Ministry seeking a ban on Popular Front of India-PFI.
- This was done after two dozen members of PFI were arrested from various parts of the state by UP police for their alleged involvement in violence during the protests against the Citizenship Amendment Act.
- State Police says it has impounded objectionable material from the arrested persons and a detailed report has been sent to the Home Ministry for further action.

What is the background?

- The PFI was set up in 2006 as a successor of the National Development Fund in Kerala, Manitha Neethi Pasarai in Tamil Nadu and Karnataka Forum for Dignity in Karnataka.
- The group has inter state dimension which is also seen as its advantage and describes itself as a cadre based movement working for the socio-economic welfare of the Muslim community.
- The group claims to be working for upholding the human rights of the underprivileged communities in the country.

What does the intelligence inputs say?

- Country made bombs weapons, several documents containing Taliban and Al-Qaeda propaganda have been unearthed from PFI activists.
- Students Islamic Movement of India (SIMI) is an offspring of the group which is a banned terrorist organization and operated

predominantly from UP and was subsequently banned in 2001.

- Jharkhand State Government banned the group in 2019 under the Criminal Law (Amendment) Act, 1908 to curb the spread of violence and Anti-National activities, as the group was found to have connections with other terrorist groups like ISIS.
- SIMI has been termed as a militant, extremist group with a subversive agenda and has been charged for several crimes and for plotting various Anti-National activities.
- The PFI has come into the spotlight for instigating violence during the National Register of Citizens (NRC) and CAA protests in 2019.
- Groups like Goa's Citizen's Forum, Rajasthan's Community Social and Educational Society, Manipur's Lilong Social Forum, Andhra Pradesh's Association of Social Justice and West Bengal's Nagarik Adhikar Suraksha Samiti have merged with the PFI.

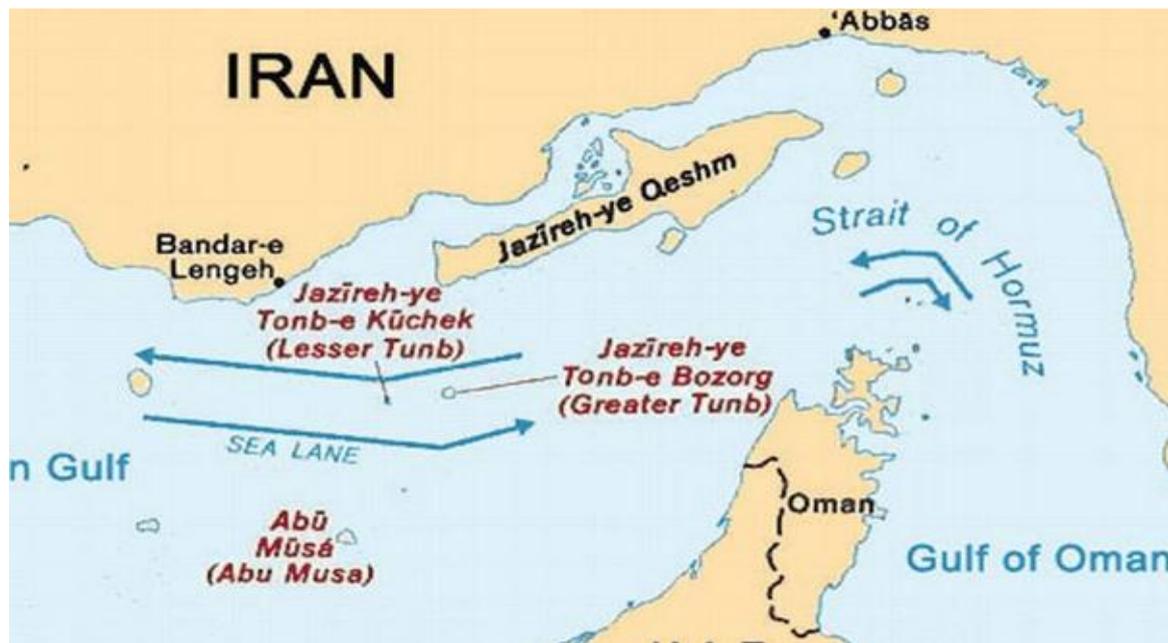
What are the cases involving PFI?

- PFI has been accused of being involved in several political killings, religious conversions apart from links to ISIS.
- The most infamous attack was the severing of the hand of T.J. Joseph, a professor at Newman College, Kerala for hurting the religious sentiments of Muslim students.
- It is accused running a terror training camp in Kerala, where Muslim youths were trained in explosives and arms.
- The PFI members were actively involved in 27 murder cases and 86 attempt to murder cases, mostly of the cadres of Communist Party of India-Marxist (CPI-M) and Rashtriya Swayamsevak Sangh (RSS).
- It has also played a part in radicalising the masterminds of the Sri Lankan Easter bombings on 21 April 2019, which killed over 250 people.
- It is being accused of playing a part in radicalising the masterminds of the Sri Lankan Easter bombings on 21 April 2019, which killed over 250 people.
- The PFI members in Karnataka have been allegedly involved in four political murders of RSS workers.
- **What are the issues involved?**
- The PFI hides behind the cover of human rights groups, claiming to be a group

advocating social change and standing up for the underprivileged section of the society in the country which makes it difficult for Law enforcement agencies to take strict action against them or to even prove their involvement in anti-national activities.

- It acts as a cross-linking platform and as a connecting bridge between the terrorist organizations.
- It involves instigating the misinformed civilians to protest on public issues creating a disruption of peace and in some situations destruction of public property.
- Funding of such organizations is a major issue as there is a lot of money which flows in, as donations from various parts of the world.
- **What is the way forward?**
- Despite sufficient evidence, there have been flaws in appropriate actions due to lack of political will and lacunae in existing laws.
- Ban such groups under the Unlawful Activities (Prevention) Act, 2019- UAPA, 2019 whose main objective was to make powers available for dealing with activities directed against the integrity and sovereignty of India.
- Foreign contributions must be regulated as almost 60% of the foreign contributions went to Christian groups, 20-28% went to Islamic groups and the rest went to organizations involved in public interest litigations and human rights groups.
- The flow of income to such groups and organizations, in accordance with the Foreign Contribution (Regulation) Act (FCRA), must be regulated.
- **Conclusion**
- The Government of India should take cognizance of the gravity of the issue and come down with a heavy hand on the PFI. It should also take steps to monitor the funding and the activities of other similar organizations. The individuals responsible for such crimes must be booked under appropriate sections, thereby preventing the spread of anti-national activities and violence.

3) US-Iran Tension



Why in news?

- The United States of America has struck a significant blow against Iran by killing the Commander of Iranian Quds Force General Qassem Solemani in an air strike near Baghdad International Airport.
- This has led to escalation of tensions between the two nations.

What is the background?

- While the Pentagon described the air strike as a decisive defensive action to protect US personnel abroad, Iran's Supreme Leader Ayatollah Ali Khamenei said in a statement that the jihad of resistance against all enemies will continue with a doubled motivation. Meanwhile the US has urged all its citizens to leave Iraq immediately.

What is the current situation?

- Tensions have rocketed and they are on the threshold of what could prove to be an escalation in hostilities.
- It started with the withdrawal of the U.S. from the nuclear deal, as President Trump had promised, and the re-imposition of sanctions against Iran.
- Iran said that unless the Europeans step up to ease the sanctions, Iran will not adhere to certain elements of the nuclear deal.
- This nuclear deal includes the limits for the stockpile of low-enriched Uranium and that later on, it might start enriching Uranium below the low-enriched threshold.
- Iran is also gradually stepping up the pressure on U.S. allies to either adhere to the waiver of sanctions which was implicit in

the deal, or face the possibility that Iran could gradually renege from the agreement.

- The U.S. had also escalated their military deployments in the Gulf with the deployment of around 1500 troops, an aircraft carrier, and surveillance aircraft and so on.

What is the impact of war on West Asia?

- It would be a prolonged process and one is not sure as to what the consequences might be if the U.S. is looking at a regime change in Iran.
- In Iran, there is no guarantee as to what the outcome is going to be, except for the fact that the U.S. could really get trapped into a very prolonged war of attrition.
- The U.S. has said that it would re-impose sanctions (which was suspended), on the account of lack of Iranian action with regards to money laundering and terrorist financing.
- The U.S. is going to use the Financial Action Task Force (FATF), to put Iran on notice on these counts, and reimpose the sanctions which were suspended by the FATF.
- The U.S. would rely for the moment on economic pressure and ratcheting up the military rhetoric, but perhaps will not use it.

What are the implications for India?

- India is heavily dependent on energy imports from the region, including from Iran.
- India's major refineries are geared to Iranian oil.

- India has longer term strategic interests in Iran, including the port of Chabahar.
- India would need to weigh against this strategic relationship she has with the United States of America.
- There is an energy cost that India pays each time her energy supplies are impacted.

Conclusion

- India would hope that at the end of the day, diplomacy should be given a chance. United Airlines have suspended its flights from the United States to India because these flights fly over Iranian airspace. America needs to understand the culture of the region, and the culture of Iran and America needs to understand the culture of the region, and the culture of Iran.

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