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# Polity and Governance

## Highlights

- Re-promulgation of Triple Talaq Ordinance (1)
- Modify Eviction Order: Centre urges SC (2)
- Rail Drishti Dashboard (2)

## Re-promulgation of Triple Talaq Ordinance

- Recently the Union cabinet approved the promulgation of **Muslim Women (Protection of Rights on Marriage) Ordinance, 2019**, for the third time. Making Triple Talaq a cognisable offence.
- This ordinance makes Instant Triple Talaq or Talaq-e-biddat a cognizable offense.
- In August 2017, the Supreme Court ruled that Instant Triple talaq or talaq-e-biddat is unconstitutional and illegal in *Shayara Bano vs. Union of India and Ors.*
- To enforce the Supreme Court ruling, the government brought The Muslim Women (Protection of Rights on Marriage) Bill, 2017.
- The bill was passed by Lok Sabha, but the bill remains pending in Rajya Sabha.

### Ordinance Making Power of President

- Under the Constitution, the power to make laws rests with the legislature. However, Article 123 of the constitution empowers the President to promulgate ordinance on urgent matter when Parliament is not in session, and 'immediate action' is needed.
- After the ordinance is notified it is to be laid before Parliament within 6 weeks of its first sitting.
- The maximum life of a ordinance can be 6 months and 6 weeks.
- When both the houses are in session, an ordinance promulgated at that time is void.
- In addition, the President may chose to withdraw the ordinance.

### Ordinance: Supreme Court Verdict Timeline

- In Cooper case, (1970), the Supreme Court held that the President's satisfaction can be questioned in a court on the ground of malafide.

- The 38<sup>th</sup> Constitutional Amendment Act of 1975 made the President's satisfaction final and conclusive and beyond judicial review. But, this provision was deleted by the 44<sup>th</sup> Constitutional Amendment Act of 1978. Thus, the President's satisfaction is justiciable on the ground of malafide.
- In the D C Wadhwa case (1987) the court ruled that successive re promulgation of ordinances with the same text without any attempt to get the bills passed by the assembly would amount to violation of the Constitution and the ordinance so re-promulgated is liable to be struck down.
- It held that the exceptional power of law-making through ordinance cannot be used as a substitute for the legislative power of the state legislature.
- In Krishna Kumar Singh vs. State of Bihar (2017), the Supreme Court stated that ordinances are subject to judicial review, and do not automatically create enduring effects.

- The ordinance gives effect to amended version of The Muslim Women (Protection of Rights on Marriage) Bill, 2017 as presented in Rajya Sabha by the government.

### Ordinance Provisions

- **Any pronouncement of Talaq** by a Muslim husband upon his wife in any manner, written, spoken or electronic, will be **illegal**.
- Any husband who pronounces triple talaq can be punished by a **jail term up to three years** and will also be liable for fine.
- Muslim women will now be entitled to custody of her minor children.
- Muslim women are now entitled to **receive maintenance for herself and her dependent** children.
- Triple talaq is now a **cognizable offense** if the case is filed by married Muslim women or any person related to her by blood or marriage.

Note:

- The offense will be compoundable, i.e. there can be a compromise but only on the insistence of the wife and magistrate will determine the terms and conditions.
- The offender can be granted bail by a magistrate but only after hearing the victim wife and if magistrate is satisfied that there is reasonable ground for bail.

### What is instant triple talaq?

- In the practice of talaq-e-biddat, when a man pronounces talaq thrice in a sitting, or through phone, or writes in a talaq-nama or a text message, the divorce is considered immediate and irrevocable, even if the man later wishes to re-conciliate. However, Women cannot pronounce triple talaq and are required to move a court for getting the divorce under the Sharia Act, 1937.
- **There are three forms of talaq** (divorce) in Islam: Ahsan, Hasan, and Talaq-e-Biddat (triple or instant talaq). Ahsan and Hasan are revocable but talaq-e-Biddat is irrevocable.
- **Triple talaq** is a practice, mainly prevalent among India's Muslim community following the **Hanafi Islamic school of law**.
- Triple talaq divorce is **banned** by many Islamic countries, including **Pakistan, Bangladesh, Turkey, UAE, and Indonesia**.

## Modify Eviction Order: Centre urges SC

- **The Centre has urged the Supreme Court to modify its recent order** directing the eviction of thousands of Scheduled Tribes (STs) and other traditional forest dwellers whose claims for forest land rights have been **rejected under the Forest Rights Act of 2006**.
- The Centre said that the **claims of lakhs** of forest-dwelling STs and other traditional forest dwellers were **rejected by the States without observing due process of law**. Following were the **arguments of Centre**:
  - The forest land claims of these tribes and forest dwellers, who live in the forest, are mostly rejected by the States.
    - **Being poor and illiterate people** who live in remote areas, they **do not know the appropriate procedure for filing claims**.
  - **The gram sabhas**, which initiate the verification of their claims, are **low on awareness** about how to deal with these claims.
  - **The rejection orders are not even communicated** to the forest-dwelling STs and communities.

## Global outlook

According to the Centre's application before the Supreme Court, the scheme of the Forest Rights Act 2006, is in tune with several international covenants

### 1 UN Universal Declaration on Human Rights

Recognises the equal rights of the human family. India is a signatory

### 2 UN Convention concerning Indigenous and Tribal Populations

Seeks to protect ownership rights of populations over lands they traditionally occupy. **Ratified by India**

### 3 UN Declaration on Rights of Indigenous People

Mandates to protect the rights of indigenous people to lands, territories and resources which they traditionally own, occupy and use. **India is a signatory**

### 4 UN Convention on Biological Diversity

Advocates preservation of indigenous knowledge and practices. **India is a party**



### 5 Rio Declaration on Environment and Development

Proclaims indigenous people have a vital role in environmental management

## Rail Drishti Dashboard

- The government has launched **Rail Drishti dashboard**, encompassing all the **digitisation efforts** in Indian Railways and **promoting transparency and accountability**.
- The **dashboard** brings information from various sources on a **single platform** and gives access to **key statistics** and parameters to every citizen of the country. Related to freight and passenger trains.

### Indian Railway Catering and Tourism Corporation (IRCTC)

- IRCTC is a Public Sector Enterprise under Ministry of Railways.
- It was incorporated on 27<sup>th</sup> September, 1999 as an extended arm of the Indian Railways to upgrade, professionalize and manage the catering and hospitality services at stations, on trains and other locations
- To promote domestic and international tourism through development of budget hotels, special tour packages, information & commercial publicity and global reservation systems.



# Economic Scenario

## Highlights

- National Policy on Electronics 2019 (3)
- LADIS – Least Available Depth Information System (4)
- Policy Bias Against Rainfed Agricultural Area (4)
- National Rural Economic Transformation Project (5)
- Khadi Gramodyog Vikas Yojana (5)
- Women's Livelihood Bond (6)
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## National Policy on Electronics 2019

The Union Cabinet gave its approval to the **National Policy on Electronics 2019 (NPE 2019)**, proposed by the **Ministry of Electronics and Information Technology (MeitY)**.

- The Policy envisions positioning India as a global hub for **Electronics System Design and Manufacturing - (ESDM)** by
  - encouraging and driving capabilities in the country for developing core components, including chipsets, and
  - creating an enabling environment for the industry to compete globally.
- The National Policy of Electronics 2019 (NPE 2019) **replaces the National Policy of Electronics 2012 (NPE 2012)**.

### Salient Features of NPE 2019

- **Creation of ecosystem for globally competitive ESDM sector.**
- Providing incentives and support for **manufacturing of core electronic components**.
- **Providing special package of incentives for mega projects.**
- **Formulation of suitable schemes and incentive mechanisms to encourage new units and expansion of existing units.**
- **Promotion of Industry-led R&D and innovation in emerging technology areas such as 5G, Internet of**

**Things (IoT)/ Sensors, Artificial Intelligence (AI), Machine Learning, Virtual Reality (VR), Drones, Robotics, Additive Manufacturing, Photonics, Nano-based devices, etc.**

- Providing incentives and support for significantly **enhancing availability of skilled manpower, including re-skilling.**
- Creation of **Sovereign Patent Fund (SPF)** to promote the development and acquisition of Intellectual Properties (IPs) in ESDM sector.
- Promotion of trusted electronics value chain initiatives to improve national cyber security profile.

### NOTE:

**Sovereign Patent Fund (SPF)** is a **state-led investment vehicle** intended to strategically acquire important IP assets, thereby promoting national economic objectives.

### Implementation Strategy and Targets

- The Policy will lead to the formulation of several schemes, initiatives, projects and measures for the development of ESDM sector in the country as per the roadmap envisaged therein.
- The target of the policy is to promote domestic manufacturing and export in the entire value-chain of ESDM for economic development.

### Major Impact

- It will **enable flow of investment and technology**, leading to higher value addition in the domestically manufactured electronic products, **increased**

Note:

electronics hardware manufacturing in the country and their export, while generating substantial employment opportunities.

## LADIS – Least Available Depth Information System

To ensure optimum use of National Waterways (NWs), the Inland Waterways Authority of India (IWAI) has launched a new portal LADIS – Least Available Depth Information System.

- LADIS will ensure that **real-time data on least available depths** is disseminated for ship/barge and cargo owners so that they can undertake transportation on NWs in a more planned way.
- IWAI has designed LADIS to facilitate the **day-to-day operations of inland vessels plying on NWs** and to avoid any hindrance in service and operation.
- It will enhance **credibility and efficiency of information sharing** to achieve seamless operations on NWs, besides pre-empting problems that may occur during movement of vessels.

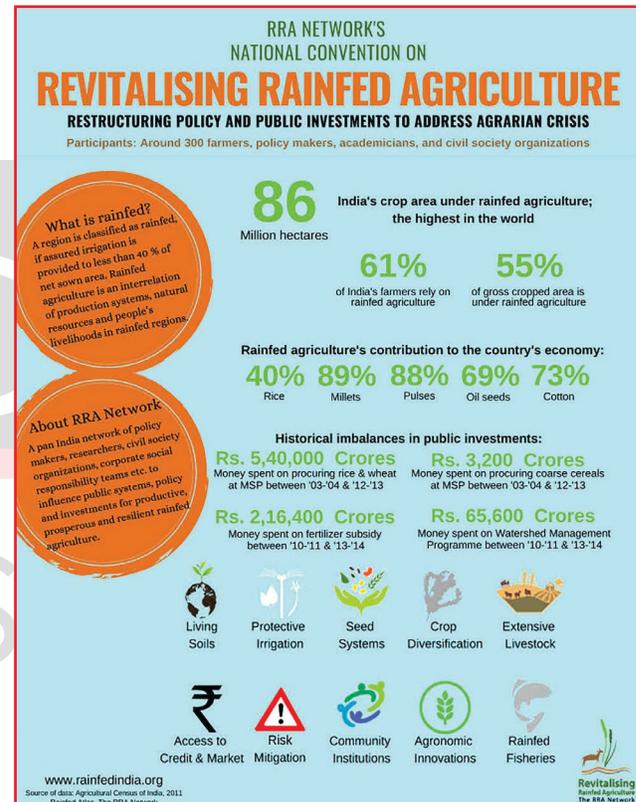
### Inland Waterways Authority of India (IWAI)

- The IWAI is a statutory body under Ministry of Shipping, established in 1986.
- It is headquartered in Noida, Uttar Pradesh and its main function is to build necessary infrastructure in inland waterways, surveying economic feasibility of new projects and also carrying out administration and regulation.
- As per the National Waterways Act, 2016, 111 waterways have been declared as NWs.
- In 2018, the IWAI also launched a portal known as Forum of Cargo Owners and Logistics Operators (FOCAL) for cargo owners and logistic operators to access real time data on availability of vessels.
- In 2018, IWAI signed a project agreement with the World Bank for Jal Marg Vikas Project on river Ganga which aims for capacity augmentation of navigation on NW-1 (River Ganga) from Varanasi to Haldia.
- These initiatives are a part of objective to develop NWs as a key transport intervention and lower huge logistics costs, which currently account for 15% of the GDP and is about twice that of the U.S.' logistics costs.

## Policy Bias Against Rainfed Agricultural Area

Recently a new rainfed agriculture atlas was released highlighting the **policy biases that are making farming unviable for many in these areas.**

- There has been **negligence toward rainfed areas** which is leading to lower incomes for farmers in these areas.
- Further farmers in rainfed areas are **receiving 40% less of their income from agriculture** in comparison to those in irrigated areas.



### Key Issues

- Even though **rainfed agriculture contributes to 60% of the value of agriculture GDP of India**, there is a clear-cut bias towards irrigated areas when it comes to public investment in agriculture in the country.
- In terms of procurement over the **decade between 2001-02 and 2011-12**, the government procured **₹5.4 lakh crore of wheat and rice.**
- On the other hand, **coarse cereals**, which are **grown in rainfed areas**, only had **₹3,200 crore** worth of procurement in the same period.

Note:

- **Flagship government schemes**, such as seed and fertiliser subsidies and soil health cards, are designed for irrigated areas and **simply extended to rainfed farmers without taking their needs into consideration.**

### Way Forward

- **More balanced approach** is needed, to give rainfed farmers the same research and technology focus, and production support that their counterparts in irrigation areas have received over the last few decades.
- There is an **urgent need to do more R&D in rainfed agriculture** and bring in more policy perspective like tweaking of government schemes by considering the needs of rainfed agricultural areas.
- In the long run, cash incentives and income support like the **PM-KISAN scheme** announced in the interim budget 2019 are better than extensive procurement as they are inclusive in character, and doesn't distinguish between farmers in one area or another, growing one crop or another.
- Along with income support to help farmers, it is now the time to **design better structured interventions for the future.**
- Like the ease of doing business, **ease of doing farming** should be done on the parameters of seeds, soil, water in rainfed areas to make agriculture attractive in the long term.

## National Rural Economic Transformation Project

The Union Cabinet has approved the implementation of an externally aided project namely **National Rural Economic Transformation Project (NRETP)** under the **Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM)** through loan assistance from **World Bank.**

### NOTE:

- Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM) was launched by the Ministry of Rural Development (MoRD), Government of India in 2011.
- The Mission aims at creating efficient and effective institutional platforms of the rural poor enabling them to increase household income through sustainable livelihood enhancements and improved access to financial services.

### Salient features

- DAY-NRLM lays special emphasis on **targeting the poorest of the poor** and the most vulnerable communities and their financial inclusion.
  - Innovative projects will be undertaken under NRETP to pilot alternate channels of financial inclusion, creating value chains around rural products, introduce innovative models in livelihoods promotion and access to finance and scale-up initiatives on digital finance and livelihoods interventions.
- DAY-NRLM provides for mutually beneficial working relationship and formal platforms for consultations between Panchayati Raj Institutions (PRIs) and Community Based Organizations (CBOs).
  - NRLM has also developed **activity map to facilitate convergence in different areas of interventions where NRLM institutions and PRIs could work together** which has been disseminated to all state Rural Livelihood Missions.

### Benefits

- It will enhance the livelihoods promotion and access to finance, and
- It will scale-up initiatives on digital finance and livelihood interventions.

## Khadi Gramodyog Vikas Yojana

The Cabinet Committee on Economic Affairs has approved the following:

- 8 different schemes of Khadi & Village Industries are now merged under two heads i.e. 'Khadi Vikas Yojana' and 'Gramodyog Vikas Yojana':
  - **Khadi Vikas Yojana** includes Market Promotion & Development Assistance (MPDA), Interest Subsidy Eligibility Certificate (ISEC), Workshed, Strengthening Weak Infra, Aam Aadmi Bima Yojana, Khadi Grant.
  - **Gramodyog Vikas Yojana include** Village Industries Grant.
- To bring in a new component of '**Rozgar Yukt Gaon**' to introduce enterprise-based operation in the Khadi sector and to create employment opportunities.

**MPDA**

- The **Market Promotion and Development Assistance Scheme (MPDA)** was launched as a unified scheme by merging different schemes implemented by the Khadi sector including publicity, marketing, market promotion, and marketing development assistance.
- Grant/subsidy was also provided for construction of **Khadi plazas**.

**Interest Subsidy Eligibility Certificate (ISEC)**

- ISEC Scheme was **launched in May 1977** to help Khadi and Polyvastra producing institutions in **mobilizing the capital funds from banking institutions**.
- Under the Scheme, **implementing agencies can avail of bank loan as per the ISEC issued by the KVIC on payment of only 4% of interest and difference between the actual interest charged by the bank and 4% is borne by KVIC as interest subsidy**.

**Rozgar Yukt Gaon**

- **Rozgar Yukta Gaon (RYG)** aims at introducing an **'Enterprise-led Business Model' in place of 'Subsidy-led model'** through a partnership among 3 stakeholders-Khadi Reform and Development Programme (KRDP)-assisted Khadi Institution, Artisans and Business Partner.

**Women's Livelihood Bond**

The **World Bank, UN Women (a United Nations entity dedicated to gender equality and empowerment of women), and Small Industries Development Bank of India (SIDBI)** have come together to launch a five-year tenor **women's livelihood bond (WLB)**.

- The proceeds from these social impact bonds will be used to help rural women in the country's poorest States to set up or scale up their own enterprises.
- WLB's will be unsecured and unlisted.

**Unsecured and Unlisted Bonds**

- **Unlisted Securities:** Unlisted securities are shares, bonds or any other securities that are not traded on a stock exchange but traded through the **over-the-counter (OTC) market**.
- **Unsecured Bonds:** Unsecured bonds, also called debentures, are not backed by any collateral, or mortgages on real estate. Instead, the issuer promises that they will be repaid. This promise is frequently called "full faith and credit."

**Angel Tax**

The **Ministry of Commerce and Industry** has revised the current definition of startups and has addressed the raging issue of angel tax.

- Concerns had been flagged off by the industry earlier on taxation of angel investments and other issues that need urgent attention for availability of capital to startups.
- Funds from angels are subjected to over 30% tax if it is more than the fair market value (FMV). Introduced in Section 56 of the I-T Act in Budget 2012, it explicitly states that companies - from mature private enterprises to small startups - are liable to pay taxes on money invested at capital. But with most startups taking years just to break-even, treating part of the hard-won cash that came in from angels as taxable income, even before a company begins to make money seems unwarranted.

**Angel Tax**

- Angel tax is a term used to refer to the income tax payable on capital raised by startup companies via the issue of shares where the share price is seen in excess of the fair market value of the shares sold. The excess realization is treated as income and taxed accordingly.
- The angel tax is levied on investments made by external investors in startups or companies. The entire investment is not taxed - only the amount that is considered above "fair value" valuations of the startup.
- The tax was introduced in the 2012 Union Budget to arrest laundering of funds by portraying them as angel investment.

**RBI to Merge Three Categories of NBFCs**

The Reserve Bank of India (RBI) has decided to **merge three categories of Non Banking Financial Companies (NBFCs) into a single category** to provide greater **operational flexibility to non-banking lenders**.

- NBFCs categorized as **Asset Finance Companies (AFC), Loan Companies (LCs)** and **Investment Companies (ICs)**, will be merged into a new category called NBFC - Investment and Credit Company (**NBFC-ICC**).

- **Asset Finance Company (AFC)** : An AFC is a company which is a financial institution focussing on financing of physical assets supporting productive/economic activity, such as automobiles, tractors, generator sets etc.
- **Investment Company (IC)** : IC means any company which is a financial institution carrying on as its principal business the acquisition of securities.
- **Loan Company (LC)**: LC means any company which is a financial institution carrying on as its principal business the providing of finance whether by making loans or advances or otherwise for any activity other than its own but does not include an Asset Finance Company.

### Non-Banking

#### Financial Company (NBFC)

- A Non-Banking Financial Company (NBFC) is a **company registered under the Companies Act, 1956** engaged in the business of loans and advances, acquisition of shares/stocks/bonds/debentures/securities issued by Government or local authority or other marketable securities of a like nature.
- NBFC **does not** include any institution whose **principal business** is that of **agriculture activity, industrial activity, purchase or sale of any goods** (other than securities) or providing any services and sale/purchase/construction of immovable property.
- A non-banking institution which is a company and has principal business of receiving deposits under any scheme or arrangement in one lump sum or in installments by way of contributions or in any other manner, is also a non-banking financial company (Residuary non-banking company).

#### Difference between Banks & NBFCs

- NBFCs lend and make investments and hence their activities are akin to that of banks; however there are a few differences as given below:
  - NBFC **cannot accept demand deposits**;
  - NBFCs **do not form part of the payment and settlement system** and cannot issue cheques drawn on itself;
  - **Deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation is not available** to depositors of NBFCs, unlike in case of banks.

## Pradhan Mantri Kaushal Vikas Yojana (PMKVY)

Launched in 2015, it is a flagship program of **Ministry of Skill Development and Entrepreneurship (MSDE)**. **National Skill Development Corporation (NSDC)** implements it with the help of training partners.

- It aims to **mobilize youth to take up skill training** with the aim of increasing productivity and **aligning the training and certification to the needs** of the country.

#### National Skill Development Corporation (NSDC)

- The NSDC is a not-for-profit public limited company incorporated on July 31, 2008 under section 25 of the Companies Act, 1956 (corresponding to section 8 of the Companies Act, 2013).
- It was set up by Ministry of Finance as Public Private Partnership (PPP) model.
  - The Government of India through Ministry of Skill Development & Entrepreneurship (MSDE) holds 49% of the share capital of NSDC, while the private sector has the balance 51% of the share capital.
- It aims to promote skill development by catalyzing creation of large, quality and for-profit vocational institutions.
- It acts as a catalyst in skill development by providing funding to enterprises, companies and organizations that provide skill training.

#### Key Components

- **Short Term Training**: Training as per **National Skills Qualification Framework (NSQF)** is provided to those who are either **school/college dropouts or unemployed**.
- **Recognition of Prior Learning (RPL)**: An individual with a certain set of skills or with prior learning experience is assessed and certified under RPL with grade according to the NSQF.
- **Special Projects**: This component ensures training in special areas and premises of government bodies and corporate. It aims to **encourage training in vulnerable and marginalized groups of society**.
- **Training Partners (TPs)** are mandated to organize **Kaushal and Rozgar Melas** every six months, thus providing placement assistance to certified ones.

Note:

### Analysis

- Out of 4.06 million candidates that got enrolled between its relaunch and 24 January 2019, 3.73 million completed the course.
- **Certification Stats:** Candidates who score at least 50% of total marks are provided with certification. Nearly, 30% of those who enrolled between the above mentioned period have not been certified yet. This shows that even skill training is not enough for such people. This point towards the lack of proper basic education at schools and colleges.
- **Placement Status:** Tracking of placements is mandatory under PMKVY. **Till 26 October 2018, 1.94 lakh candidates** got a certificate and out of them, **only 55% got employed across different sectors. This shows the low employability level** under PMKVY.

### Way Forward

- The government needs to **ensure high-quality secondary education** at the secondary level **to prepare the youth for skills provided under the scheme.** It should also promote vocational education in schools.
- Accountability of Training partners.
- Industries participation need to be encouraged.
- **Around one million youth enter the workforce every month;** it is necessary to increase the number of people that go under training under the scheme.

## Draft e-Commerce Policy

The Department For Promotion of Industry and Internal Trade (DPIIT) has released the **draft National e-Commerce Policy** for public comments.

- The National e-Commerce Policy lays down strategies to address issues pertinent to the sector-**Consumer protection, data privacy, and maintenance of a level playing field.**

### Need for policy

- In 2014, the **average monthly data consumption** in India was only **0.26 GB per person**, which increased to **over 4GB at the end of 2017.**
- **Greater internet usage** means the **generation of more data** and therefore, the greater **requirement to prioritize privacy, consumer protection** and regulate the flow of data for leveraging it **to benefit the domestic economy.**

- **A regulatory environment** is necessary to ensure that there is **genuine competition** in the market, which **encourages entrepreneurship and innovation.**
- To address a few **challenges arising out of e-Commerce** of law and order, revenue-base erosion, privacy, **anti-competitive behavior, consumer protection**, etc., without harming the of growth in the e-Commerce sector.

### Key Issues Addressed

#### ➤ Data

- **Individual Right:** An Individual **owns the right to his data.** Therefore, data of an individual is must be used with his/ her **express consent.**
- **Indian Control Over Data:** There should be a **restriction on cross-border data flow.** The policy bats for **data localization** and states that the data generated within India must be **stored within India.**
- If a **business entity** that **collects or processes any sensitive data in India** and **stores it abroad**, should **not share data with business entities outside India**, for any purpose, **even with customer consent.**
- A request from Indian authorities to have **access to all such data stored abroad** shall be **complied with immediately.**
- All e-Commerce websites, apps available for download in India should have a registered business entity here. Non-compliant e-Commerce app/ website to be denied access here.

#### ➤ Infrastructure development

- It stressed on **developing physical infrastructure for a robust digital economy** and suggested steps for developing the **capacity for data storage in India.**
- **Incentives** will be provided **to companies** for **establishing data localization** location facilities like data centers, server farms within India.
- **Firms to get 3 years to comply with local data storage requirements** and **data storage facilities** should be given '**infrastructure status**'.
- **Domestic alternatives to foreign-based clouds and email facilities** should be promoted through budgetary support.

#### ➤ e-Commerce marketplaces

- The policy mentions that foreign direct investment (**FDI**) is allowed only in the marketplace model, **not in inventory based model.**

- This is in line with the e-Commerce guidelines given by the government in December.
- The policy also takes into account the interests of domestic manufacturers and Micro, Small and medium enterprises and seeks to create a level playing field for them in online retail.
- To curbs on Chinese e-commerce exports the Gifting route (where goods are shipped as gifts), often used by Chinese apps, websites should be banned for all parcels except life-saving drugs.
- To prevent fake products, Seller details should be made available on the website for all products and sellers must provide an undertaking to the platform about the genuineness of products.
- **Stimulating the domestic digital economy**
  - There is a need to formulate domestic industrial standards for smart devices and IoT devices to meet the goals of the country like consumer protection.
  - Online custom clearance will eliminate the need for manual processes and will help in ease of doing business.
  - Continued focus on Digital India initiatives by the Government will help in the development of the e-Commerce sector.
- **Export promotion**
  - e-Commerce startups may get 'infant industry' status raising the limit for courier shipments from ₹25,000 to boost e-Commerce export.
  - To promote export it is necessary to lower the cost of transport, reducing paperwork, reducing delays at ports and airports etc.
  - Integrating Customs, RBI and India Post to improve tracking of imports through e-Commerce.

## Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)

The Prime-minister launched PM-KISAN scheme from Gorakhpur in Uttar Pradesh on Feb. 24, 2019.

- Under PM-KISAN, vulnerable landholding farmer families, having cultivable land up-to 2 hectares, will be provided direct income support at the rate of ₹6,000 per year.
- This income support will be transferred directly into the bank accounts of beneficiary farmers, in three equal installments of ₹2,000 each.

- This programme is under the aegis of Ministry of Agriculture and Farmers Welfare and aims to address farm sector distress, caused by lower sales realization on bumper production of food-grains, oilseeds, sugarcane, cotton and horticulture crops.
- State Government and UT Administration will identify the farmer families which are eligible for support as per scheme guidelines.
- This programme will entail an annual expenditure of Rs.75,000 crore which will be funded by the Government of India. Around 12 crore small and marginal farmer families are expected to benefit from this.

## Aviation Conclave 2019

The Ministry of Civil Aviation, in association with Airports Authority of India (AAI), Airport Authority of India - Cargo Logistics & Allied Services Company Limited (AAICLAS) and Confederation of Indian Industry, is organizing the Aviation Conclave 2019.

- The theme of the conclave is "Flying for All".
- Aviation Conclave brings into focus new aviation business to India, in particular,
  - drones systems,
  - manufacturing of aircraft in India,
  - financing and leasing of aircraft from India by Indian and foreign airlines,

Note:

- transforming Indian airports into **next-gen aviation hubs**,
- and **unleashing the air cargo potential** by integrating every **village of India** in global value chains.

### The 5 Key Areas of Deliberation

- **Drone-Ecosystem Policy Roadmap**,
- **Roadmap for Manufacturing Aircraft and associated equipment**, including Regional Transport Aircraft, in India,
- The **Project Rupee Raftaar**- which aims at **Aircraft Financing and Leasing** from India,
- **National Air Cargo Policy**: it seeks to make India among the **top five air freight markets by 2025**, besides **creating air transport shipment hubs** at all major airports over the next six years.
  - The policy will encourage **code sharing/interline agreements** between foreign and Indian carriers.
- **Mission to transform Indian Airports** into Next-Gen Aviation Hubs

### India's Aviation Industry

- Indian civil aviation industry is undergoing an expansion, driven by factors such as **low-cost carriers (LCCs)**, **modern airports**, **Foreign Direct Investment (FDI) in domestic airlines**, **advanced information technology (IT) interventions** and a strong **focus on regional connectivity**.
- Growth in aviation is also **increasing demand for MRO** (maintenance, repair, and overhaul) facilities.
- Greater focus is given on **infrastructure development – increasing liberalization - Open Sky Policy**; AAI driving modernization of airports and Air & Navigation Systems.
- **Enhanced Skill Development** in the sector can **leverage India's human capital** potential and can create job opportunities.
- **Innovation and Technology – GPS Aided Geo Augmented Navigation (GAGAN)**: India's **first satellite-based navigation system** has been launched along with NO Objection Certificate Application System (NOCAS) which streamlines online process of timely NOC **for height clearances of buildings** around airports and E-Governance for Civil Aviation (eGCA) which regulates online delivery of licensing and regulatory processes of Directorate General of Civil Aviation.

### Government's Policy

- **Regional connectivity scheme of UDAN (Ude Desh ka Aam Nagrik)** initiated by the government in 2016 aims to make **flying affordable by connecting unserved airports** across the country.
- **NABH (Nextgen Airports For Bharat) Nirman**, announced in the 2018-19 budget, aims to expand airport capacity by more than five times to handle a billion trips in a year.
- **National Civil Aviation Policy (NCAP)** was framed to **boost regional air connectivity**, establish an integrated ecosystem to promote **tourism** and generate employment.

### SATAT Scheme

Recently the **Minister of Petroleum and Natural Gas** has handed over the 100<sup>th</sup> Letter of Intent (LOI: is a document outlining the understanding between two or more parties) to the **Compressed Bio-Gas (CBG) Entrepreneur (producer)** under the **Sustainable Alternative Towards Affordable Transportation (SATAT) scheme**.

- SATAT has following **four objectives**:
  - **Utilising more than 62 million metric tonnes of waste generated every year** in India,
  - **Cutting down import dependence**,
  - **Supplementing job creation** in the country, and
  - **Reducing vehicular emissions and pollution from burning of agricultural / organic waste**.

#### Compressed Biogas

- Bio-gas is produced naturally through a process of anaerobic decomposition from waste/biomass sources like agriculture residue, cattle dung, sugarcane press mud, municipal solid waste, sewage treatment plant waste, etc. After purification, it is compressed and called Compressed Biogas (CBG), which has pure methane content of over 90%.
- CBG is exactly similar to the commercially available natural gas in its composition and energy potential.
- CBG can be used as an alternative and renewable automotive fuel. Given the abundance of biomass in the country, CBG has the potential to replace CNG in automotive, industrial and commercial uses in the coming years.

Note:

- Advantages of converting agricultural residue, cattle dung and municipal solid waste into CBG on a commercial scale:
  - **Responsible waste management**, reduction in carbon emissions and pollution.
  - Additional **revenue source for farmers**.
- **Boost to entrepreneurship**, rural economy and employment.
- Support to national commitments in achieving **climate change goals**.
- **Reduction in import** of natural gas and crude oil.
- **Buffer against crude oil/gas price fluctuations**.



# International Relations

## Highlights

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## India Revokes MFN Status to Pakistan

In a major diplomatic move, **India withdrew the Most Favoured Nation (MFN) status accorded to Pakistan** in its bid to convey a strong message to the country in the aftermath of Pulwama terror strike.

### What does Most Favoured Nation mean?

- **Article 1 of General Agreement on Tariffs and Trade (GATT), 1994**, requires every World Trade Organization (WTO) member country to accord MFN status (or preferential trade terms with respect to tariffs and trade barriers) to all other member countries.
- Accordingly, India accorded MFN status to all WTO member countries, including Pakistan, from the date of entry into force of the so called Marrakesh Agreement, establishing the WTO.

### NOTE:

- **Established in 1995**, WTO, replaced General Agreement on Trade and Tariffs (**GATT**) that has been in existence since **1948** to **promote international trade** after World War II.
- The bulk of the WTO's current work comes from **1986–94 negotiations** called the **Uruguay Round** and earlier negotiations **under** the General Agreement on Trade and Tariffs (**GATT**).
- Although it **sounds as if MFN offers preferential treatment**, it only ensures **non-discriminatory trade**.

- It makes sure that any country receiving MFN status avoids any disadvantageous situation in comparison to the granter's other trade partners.
- According to the World Trade Organisation rules, countries **cannot normally discriminate between their trading partners**.
- **If one country is granted a trade concession** such as, for example, **lower import duties**, then **all WTO members** must be extended the **same concessions**.
  - **This principle** is known as the **Most Favoured Nation treatment**.
  - Despite repeated promises, Pakistan has never granted MFN status to India.
- Therefore, MFN is a non-discriminatory trade policy as it ensures equal trading among all WTO member nations rather than exclusive trading privileges.
- Since India and Pakistan are part of the WTO, both are required to grant MFN status to each other and other partner countries.

### What does revoking MFN mean?

Revoking it means **India can levy whatever import tariffs it wants**. India can now make it very **expensive for Pakistan to export** its goods or services to India.

### What happens now?

The commerce ministry will now **write to WTO** in order to **revoke MFN status given to Pakistan** by invoking **Article 21 of WTO**, also known as the **Security Exceptions Article**.

### Impact Analysis

- So far, **India** has **only revoked the MFN status**. It has **not altered the import duties** on Pakistan. However, if it does hike them, then this will likely have an impact on Pakistan.
- **The scale of that impact is questionable** because as per Commerce Ministry data, India's total trade with Pakistan is only \$2.4 billion in 2017-18, with just \$488.56 million of this being imports from Pakistan which is meagre. Therefore, revoking Pakistan's MFN status seems to be more of a **symbolic move**.
- It **may further give a push to the illegal trade** between the two countries, which takes place through **border gaps** and **via third countries**.
- It could also give a handle to **extremist elements in Pakistan** to scale up the **rhetoric against India**.
- However, the decision by India to withdraw MFN status to Pakistan is intended to **isolate Pakistan diplomatically** and squeeze the country's industry.
- This move will adversely affect the image of Pakistan as a trade partner and investment hub.

### India-ASEAN Expo and Summit

Recently the **Minister of Commerce & Industry** inaugurated the **4<sup>th</sup> India-ASEAN Expo and Summit 2019** in New Delhi.

- It is organised by the **Department of Commerce** in collaboration with industry body, '**Federation of Indian Chambers of Commerce & Industry (FICCI)**'.
- The Summit is a platform for the policy makers, industry captains and business leaders to come together and forge a common vision for India and ASEAN's mutual growth and progress.
- The Summit is a testimony of India's dedicated efforts towards **Act East policy**.

#### Association of Southeast Asian Nations (ASEAN)

- ASEAN was established on 8 August 1967 in Bangkok, Thailand, with the signing of the Bangkok Declaration by the Founding Fathers of ASEAN, namely Indonesia, Malaysia, Philippines, Singapore and Thailand.
- Brunei Darussalam then joined in 1984, Vietnam in 1995, Lao People's Democratic Republic and Myanmar in 1997, and Cambodia on 30 April 1999, making up what is today the ten Member States of ASEAN.

- The motto of ASEAN is "One Vision, One Identity, One Community".
- 8<sup>th</sup> August is observed as ASEAN Day.
- ASEAN Secretariat – Jakarta, Indonesia.

### India and ASEAN

- India-ASEAN trade and investment relations have been growing steadily, with **ASEAN being the second largest trading partner** of India, after China, with a total bilateral merchandise trade of USD 81.33 billion, i.e. **10.58% in India's overall trade**.
- India and ASEAN represent **fast moving economies**.
  - According to the recently published **United Nations' World Economic Situation and Prospects Report 2019**, India and ASEAN are set to **outpace the global growth (3.0% in 2019)**.
- India continues to be the fastest growing major economy and is expected to grow at 7.2% in 2019 and ASEAN at 5.2%.
- This is a manifestation of the **new emerging world economic order**, wherein India and ASEAN have a significant place.
- India currently is working with ASEAN on **multiple connectivity projects, through land, water, and air**. E.g.:
  - India-Myanmar-Thailand Highway, Kaladan Multinational Transit Transport Project,
  - Project Development Fund for **CLMV countries (Cambodia, Laos, Myanmar and Vietnam)**.
- ASEAN remains central to the economic integration of the Indo-Pacific region through **Regional Comprehensive Economic Partnership (RCEP)**.

#### Regional Comprehensive Economic Partnership (RCEP)

- The RCEP is a mega-regional free trade agreement (FTA) which aims to cover goods, services, investments, economic and technical cooperation, competition and intellectual property rights.
- It is being negotiated amongst 16 countries, comprising 10 ASEAN countries plus six ASEAN FTA partners – India, China, Japan, South Korea, Australia, and New Zealand.

### Way Forward

- Both sides need to **explore opportunities through connectivity projects** in order to remove physical

impediments to trade and further **integrate the two regions for better economic and trade relations.**

- Increasing the **rate of technology adoption and providing financing mechanisms** is another option to expand growth.

## Argentina's President Visit to India

President of Argentina Mauricio Macri paid a state visit to India.

- 2019 is the **70<sup>th</sup> year of establishment of diplomatic relations** between the two countries.



### India-Argentina Relations

- **Political Ties**
  - During the visit, both countries decided to elevate cooperation to a strategic partnership with a focus on key areas for the prosperity of both countries.
- **Counter-Terrorism**
  - India and Argentina **issued a separate joint declaration to fight terrorism.**
  - Argentina condemned the recent terrorist attack in Pulwama, Jammu and Kashmir in the strongest terms.
  - India also urged to implement the **11-point agenda of 'Hamburg Statement on countering terrorism'** which was agreed during G-20 Summit in 2018.
- **Economic and Commercial Engagement**
  - In the last 10 years, the bilateral trade has more than doubled and is around the US \$ 3 billion.
  - There are possibilities for a significant increase of trade in many sectors such as agriculture, metals, and minerals, oil and gas, pharmaceutical, chemicals, motor vehicles and services.

- India and Argentina **decided to work together to further enhance and diversify trade and investment** by eliminating impediments, facilitating greater market access and promoting trade and investment.

- **Agriculture**

- India sees Argentina as an important partner for its food security.
- During the visit, both countries decided to enhance the scope of agricultural cooperation, including the exchange of technology to increase productivity, reduce post-harvest losses and build climate resilience.

- **Mining**

- Argentina is a part of the **Lithium Triangle** (Argentina, Chile and Bolivia), and it has approximately **54% of the world's lithium reservoir.**
  - India's public sector mining company, Khanij Bidesh India Limited (KABIL), has decided to establish a joint venture for the lithium mining in Argentina.

- **India-Mercosur**

- India was the first country to sign a Preferential Trade Agreement with MERCOSUR in 2004.
- Argentina and India agreed to expand the PTA.

#### MERCOSUR

The Southern Common Market (MERCOSUR for its Spanish initials) is a regional integration process, initially established by Argentina, Brazil, Paraguay, and Uruguay, and subsequently joined by Venezuela and Bolivia.

- **International Cooperation**

- Argentina has played a **major role in India's accession to the various non-proliferation regimes**, including the **Missile Treaty Control Regime, Wassenaar Arrangement, and Australia Group.**
- India and Argentina reaffirmed their commitment to globalization and reformed multilateralism.
- Both sides agreed to work together for **reforms in World Trade Organization (WTO) and comprehensive reform of the UN Security Council.**

- **South-South Cooperation**

- India will be participating in the second high-level conference of the **United Nations on South-South Cooperation in Buenos Aires in 2019 (BAPA+40) Buenos Aires plan of Action.**

Note:

- Other Memorandum of Understanding (MoU) cover the areas like Defence Cooperation, Space Cooperation, Nuclear Energy, Oil and Gas, Renewable Energy, Education, Culture, People to People Exchanges etc.

## Saudi Arabia's Crown Prince Visit to India

Recently, **Crown Prince of Saudi Arabia Mohammed bin Salman** visited India.

- This was the **first state visit** of crown prince in India.



### Outcome of Visit

- A number of memorandum of understandings (MoUs) were signed during the visit on investing in the **National Investment and Infrastructure Fund of India**, cooperation programme between **Invest India** and **Saudi Arabia General Investment Authority (SAGIA)**.
- Other MoUs include tourism, housing, exchange of Audio-Visual Programmes.
- Saudi Arabia also agreed to join the **International Solar Alliance (ISA)**.
- The two sides called for early adoption of the UN **Comprehensive Convention on International Terrorism (CCIT)**.

#### National Investment and Infrastructure Fund of India (NIIF)

- The NIIF is a sovereign fund owned by the government of India (49% ownership) along with global and domestic institutional players. The size of fund is ₹40,000 crore.
- The fund has an investment “mandate to invest in infrastructure assets and related businesses” that are projected to see “long term growth trajectory”.

### India-Saudi Arabia Relations

- **Strategic Partnership**
  - Saudi Arabia is a **strategic partner of India** since the signing of the **Riyadh Declaration in 2010**.
- **Economic Relations**
  - Saudi Arabia is India's 4<sup>th</sup> largest trading partner and bilateral trade stood at around US\$ 28 billion during 2017-18.
- **Energy Security**
  - India imports more than 17% of crude oil and 32% of Liquefied Petroleum Gas (LPG) requirements from Saudi Arabia.
  - Recently, Saudi ARAMCO in partnership with UAE has agreed to invest US\$ 44 billion to build an integrated refinery and petrochemicals complex at Ratnagiri in Maharashtra.
  - Saudi Arabia also has a major role in India's **Strategic Petroleum Reserves (SPRs)**.

#### Strategic Petroleum Reserves

- Strategic petroleum reserves are huge stockpiles of crude oil to deal with any crude oil-related crisis like the risk of supply disruption from natural disasters, war or other calamities.
- India's strategic crude oil storages are currently located at Visakhapatnam (Andhra Pradesh), Mangaluru (Karnataka), and Padur (Karnataka)
- Recently, the government had announced setting up of two additional facilities at Chandikhol (Odisha) and Padur (Karnataka).

### Diaspora Relations

- There are about **2.7 million Indians living in Saudi Arabia**. They send **remittance of over US\$ 11 billion** annually. Saudi Arabia also facilitates Hajj pilgrimage to over 1,75,000 Indians every year, which is the largest number of pilgrims from any country.

### Challenges to the India-Saudi relationship

- **The Saudi-Pakistan and India-Iran relationship:** Saudi Arabia's relation with Pakistan and India's relation with Iran are two important factors affecting the India-Saudi Arabia relationship.
  - **India expects Saudi Arabia to restrain Pakistan** from allowing its territory being used by terrorists targeting India.

Note:

- **Diaspora-related issues:** This includes the treatment of Indian workers in Saudi Arabia and **Saudi Arabia's Nitaqat Programme**, which aims at increasing the employment of Saudi nationals in the private sector, might limit employment opportunities for Indian expatriates.
- **Radicalization in India:** Many Saudi Arabia based agencies have been blamed for **funding spread of fundamentalist Wahhabi and Salafist ideology in India.**
  - Saudi Arabia is considered to be the **primary supporter of a supposedly more rigid interpretation of Islam.** This has implications for how Islam functions in India.

- **Wahhabism:** It is an austere form of Islam that insists on a **literal interpretation of the Koran.** Strict Wahhabis believe that all those who don't practice their form of Islam are heathens and enemies.
  - Wahhabism is named after an eighteenth-century preacher and activist, Saudi Arabian Muhammad ibn Abd al-Wahhab.
- **Salafism:** it is a reform branch or **revivalist movement within Sunni Islam** that developed in Egypt in the late 19<sup>th</sup> century as a response to Western European imperialism with roots in the 18<sup>th</sup>-century Wahhabi movement that originated in Saudi Arabia.

## 60 Years of 1959 Tibetan Uprising

Recently China has **banned foreign tourists from visiting Tibet** until April, 2019.

- The restriction is imposed due to security reasons ahead of the **60<sup>th</sup> anniversary of 1959 uprising against China** on March 10.

### Tibet

- Tibet is a region on the **Tibetan Plateau in Asia**, spanning about 2.4 million km<sup>2</sup> – nearly a **quarter of China's territory.**
- It is the traditional homeland of the Tibetan people as well as some other ethnic groups.
- Tibet is the **highest region on Earth**, with an **average elevation of 4,900 metres.** The highest elevation in Tibet is **Mount Everest**, Earth's highest mountain, rising 8,848 m above sea level.



### Tibet Uprising of 1959

- From 1912 until the founding of the People's Republic of China in 1949, no Chinese government exercised control over what is today China's Tibet Autonomous Region (TAR).
- Many Tibetans insist they were essentially independent for most of that time and have protested what they regard as China's rule imposed after the People's Liberation Army occupied TAR in 1950.
- The Dalai Lama's government alone ruled the land until 1951 when **Mao Zedong's People's Liberation Army (PLA)** marched in.
- This has often been described by the Tibetan people and third party commentators as "**a cultural genocide**".
- The unsuccessful Tibetan Uprising of 1959, in which Tibetans rebelled in an attempt to overthrow the Chinese government, led to the fleeing of the 14<sup>th</sup> Dalai Lama to India.

### Aftermath of the 1959 Tibetan Uprising

- Since the 1959 Uprising, the central government of China has been steadily tightening its grip on Tibet.
- Now there is no freedom of speech, religion, press and arbitrary detentions continue.
- **Forced abortion, sterilisation of Tibetan women, and the transfer of low-income Chinese citizens** threaten the survival of Tibetan culture.
- Although China has invested in infrastructure improvements for the region, particularly in Lhasa itself, it has also encouraged thousands of ethnic Han Chinese to move to Tibet resulting into **demographic shift.**
- The **14<sup>th</sup> Dalai Lama, continues to head the Tibetan government-in-exile** from McLeod Ganj, a suburb

Note:

of **Dharamsala** in India which coordinates political activities for Tibetans in India.

- Dalai Lama advocates increased autonomy for Tibet, rather than full independence, but the Chinese government generally refuses to negotiate with him.
- Periodic unrest still sweeps through Tibet, especially around important dates such as March 10 to 19 - the anniversary of the 1959 Tibetan Uprising.

### ***Sino-Indian Conflict Over Dalai Lama***

- Apart from the border disputes, another major irritant for China has been over the **Dalai Lama**, who enjoys a **spiritual status in India**.
- **China considers Dalai Lama a separatist**, who has great influence over Tibetans.
  - It must be mentioned that Dalai Lama **gave up his support for Tibetan independence in 1974**, and **only wants China to stop repression** against the community.
- Former Prime Minister **Jawaharlal Nehru agreed to provide all assistance to the Tibetan refugees to settle in India** until their eventual return.
- The Government of India has built special schools for Tibetans that provide free education, health care, and scholarships. There are a few medical and civil engineering seats reserved for Tibetans.
- While India's role in the **rehabilitation of Tibetan refugees** has been criticised by China, it has drawn **praise from international bodies** and human rights groups.

## **UNSC Condemns Pulwama Attack**

**United Nations Security Council (UNSC)** has condemned the suicide bombing in Pulwama, Jammu & Kashmir, in which over 40 Indian paramilitary forces personnel martyred.

- Pakistan-based terrorist organization **Jaish-e-Mohammad (JeM)** has claimed responsibility for the attack.
- The attack has received global condemnation from a number of countries including the United States, Russia, France.

### ***Significance of Condemnation***

- The condemnation of the attack by UNSC is a **diplomatic win for India** and can be seen as a part of **India's efforts to isolate Pakistan** at International level.

- There may also be a shift in China's stand against Jaish-e-Mohammad Chief Masood Azhar as the statement by UNSC names JeM as the perpetrator of the attack.
- Though JeM has been under sanction by UNSC since 2010, China has continuously vetoed resolution listing JeM chief Maulana Masood Azhar as a "global terrorist" at the **UN Security Council Resolution 1267 sanctions committee** for the last 10 years.
- However, recently China withdraw its hold from UNSC Resolution 1267 and Masood Azhar was listed as global terrorist.

### ***UNSC Resolution 1267 Sanctions Committee***

- This committee oversees the implementation of sanctions pursuant to UNSC resolutions 1267, 1989 and 2253.
- It is one of the most important and active **UN subsidiary bodies working on efforts to combat terrorism**, particularly in relation to Al Qaeda and the Islamic State group.
- It discusses UN efforts to **limit the movement of terrorists, especially those related to travel bans, the freezing of assets and arms embargoes for terrorism**.

#### **About UNSC**

- The United Nations Charter established six main organs of the United Nations, including the Security Council.
- It gives primary responsibility for maintaining international peace and security to the Security Council, which may meet whenever peace is threatened.
- All members of the United Nations agree to accept and carry out the decisions of the Security Council.
- While other organs of the United Nations make recommendations to member states, only the Security Council has the power to make decisions that member states are then obligated to implement under the Charter.
- UNSC has 15 members of which 5 are permanent and 10 are non-permanent members. Non-permanent members elected for two-year terms by the UN General Assembly.
- Five permanent members are- US, UK, France, Russia, and China.
- India has served in UNSC as non-permanent members for seven terms (a total of 14 years), with the most recent being the 2011–12 term.

Note:

## Prime Minister's Visit to South Korea

Recently, the Prime Minister of India visited South Korea (Republic of Korea).



- Prime Minister was honored with the **Seoul Peace Prize** during the visit.

### Outcome of Visit

- During the visit, a number of agreements were signed
  - MoU on the release of commemorative **postal stamp on Queen Hur (Suriratna)**, a legendary **Princess of Ayodhya, who went to Korea in AD 48** and married King Kim-Suro.
  - MoU was signed to continue operations of **Korea Plus** (an organization that facilitates investments by Korean companies in India).
    - Korea Plus was operationalized in June 2016, and comprises representatives from the Ministry of Industry, Trade & Energy of South Korea, Korea Trade-Investment and Promotion Agency (KOTRA) and **Invest India**.
  - MoU on Start-up Cooperation, Cooperation in Broadcasting, cooperation in road and transport infrastructure development was signed.
  - MoU on Combating Transnational Crime And Developing Police Cooperation was also signed.

### Seoul Peace Prize

- The Seoul Peace Prize was established in 1990 to commemorate the success of the 24<sup>th</sup> Olympic Games held in Seoul, Republic of Korea – an event in which 160 nations from across the world took part, creating harmony and friendship and a worldwide atmosphere of peace and reconciliation.

- The Seoul Peace Prize has been awarded biennially to those individuals who have made their mark through contributions to the harmony of mankind, reconciliation between nations and to world peace.

### India-South Korea Relations

- **Political**
  - During the Korean War (1950- 53), **India has played a major role in cease-fire agreement** signed between both the warring sides and the ceasefire was declared on 27 July 1953.
  - Relations between India and South Korea were raised to the level of **Strategic Partnership in January 2010**.
  - In May **2015**, the bilateral relationship was upgraded to '**special strategic partnership**'.
  - India has a major role to play in **South Korea's Southern Policy** under which Korea is looking at expanding relations beyond its immediate region.
  - Similarly, South Korea is a major player in **India's Act East Policy**.
- **Economic**
  - The current bilateral trade between India and South Korea is at USD 21 billion and the target that has been set is USD 50 billion by the year 2030.
  - India and South Korea have signed the **Comprehensive Economic Partnership Agreement (CEPA), 2010** which has facilitated the **growth of trade relations**.
  - To facilitate investment from Korea, India has launched "**Korea Plus**" **facilitation cell under 'Invest India'** to guide, assist and handhold investors.
- **Cultural**
  - Korean Buddhist **Monk Hyecho** (704–787 CE) or Hong Jiao visited India from 723 to 729 AD and wrote travelogue "**Pilgrimage to the five kingdoms of India**" which gives a vivid account of Indian culture, politics & society.
  - Nobel Laureate Rabindranath Tagore has composed a short but evocative poem – '**Lamp of the East**' in 1929, **about Korea's glorious past and its promising bright future**.
  - During the current visit, Highlighting the common Buddhist linkages, **India gifted a sapling of the sacred Bodhi Tree to South Korea**.

Note:

## Indus Water Treaty 1960

Recently the **Union Water Resources Minister** has said that the government, **under the Indus Water Treaty 1960**, has decided to **stop its share of water** which earlier used to flow to Pakistan.

### Indus Waters Treaty

- The Indus system comprises of main Indus River, Jhelum, Chenab, Ravi, Beas and Sutlej. The basin is mainly shared by India and Pakistan with a small share for China and Afghanistan.
- Under the treaty signed between India and Pakistan in 1960, all the waters of three eastern rivers, namely Ravi, Sutlej and Beas were allocated to India for exclusive use.
- While, the waters of Western rivers - Indus, Jhelum, and Chenab were allocated to Pakistan except for specified domestic, non-consumptive and agricultural use permitted to India as provided in the Treaty.
- India has also been given the right to generate hydroelectricity through run of the river (RoR) projects on the Western Rivers, which is subjected to specific criteria for design and operation.

### Present Developments

- To utilize the waters of the Eastern rivers which have been allocated to India for exclusive use, India has constructed following dams:
  - Bhakra Dam on Satluj,
  - Pong and Pandoh Dam on Beas and
  - Thein (Ranjit Sagar) on Ravi.
- Other works like Beas-Sutlej Link, Madhopur-Beas Link, Indira Gandhi Nahar Project etc. have helped **India utilize nearly entire share (95%) of waters of Eastern rivers.**
- However, about **2 Million Acre Feet (MAF)** of water **annually from Ravi** is reported to be still flowing **unutilized to Pakistan below Madhopur.**
- To stop the flow of these waters that belong to India for its utilization in India, following steps have been taken:
  - **Shahpurkandi Project:** This project will help in utilizing the waters coming out from powerhouse of Thein dam for irrigation and power generation

in J&K and Punjab. The construction work is being undertaken by the Govt of Punjab under monitoring of Govt of India.

- **Construction of Ujh multipurpose project:** This project will create a storage of water on river Ujh, a tributary of Ravi for irrigation and power generation in India. This project is a National Project whose completion period will be 6 years from beginning of the implementation.
- **The 2nd Ravi Beas link below Ujh:** This project is being planned to tap excess water flowing down to Pakistan through river Ravi, even after construction of Thein Dam, by constructing a barrage across river Ravi for diverting water through a tunnel link to Beas basin. Govt. of India declared this project as National Project.

## International Mother Language Day

- International Mother Language Day has been observed every year on **21<sup>st</sup> February** since 2000 **to promote linguistic and cultural diversity and multilingualism.**
- The idea to celebrate International Mother Language Day was the **initiative of Bangladesh.** It was approved at the **1999 UNESCO General Conference** and has been observed throughout the world since 2000.
- International Mother Language day 2019 **theme** is: **“Indigenous languages matter for development, peace building, and reconciliation”.**
- The UNESCO states that at least 43% of the estimated 6,000 languages spoken in the world are endangered.
- It recognizes **any language** that is **spoken by less than 10,000 people** as potentially **endangered.**

## Chabahar Port

- **Afghanistan**, for the first time, has **begun exports to India through Iran’s Chabahar port.**
- The delivery of the cargos will be carried out under the **International Road Transport’s TIR (Transport Internationalaux Routiers)** convention.
- The port is crucial for India’s connectivity to Afghanistan apart from an air corridor that becomes operationalized in 2017.

Note:



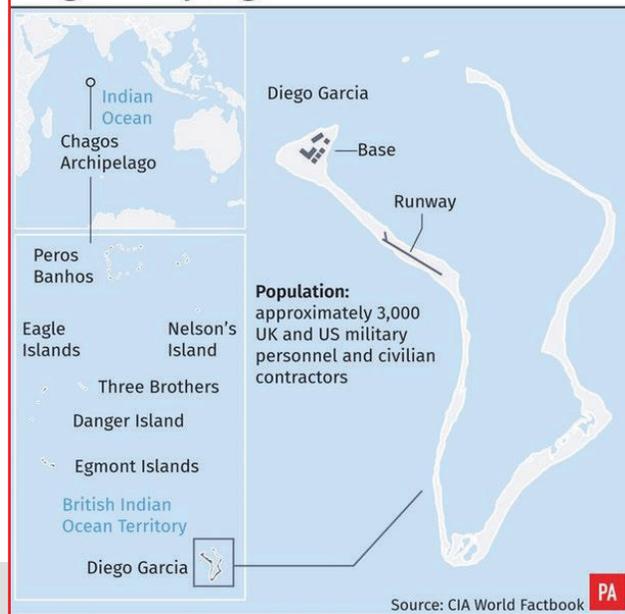
- For India, Chabahar provides access to Central Asia and International North-South Transport Corridor that connects Mumbai to Moscow.
- The port is also important for landlocked Afghanistan which is keen to get connect itself with international markets.
- The bilateral trade between India and Afghanistan jumped by 40% in 2018-19 and has crossed USD 1 billion, with imports from Afghanistan accounting for USD 740 Million.
- Afghanistan has a huge trade surplus with India, the only country with which Afghanistan has a trade surplus.

## UK asked to return Chagos Islands to Mauritius

International Court of Justice (ICJ) has asked the United Kingdom to return the Chagos Archipelago back to Mauritius.

- ICJ in its advisory opinion has said that:
  - The process of decolonization of Mauritius was not complete when the country was given independence in 1968 as the Chagos Archipelago was separated.
  - The UK should give up its administrative control over the Chagos Archipelago as rapidly as possible.

## Chagos Archipelago



### International Court of Justice (ICJ)

- The International Court of Justice (ICJ) is the principal judicial organ of the United Nations (UN).
- It was established in June 1945 by the Charter of the United Nations and began work in April 1946.
- The seat of the Court is at the Peace Palace in The Hague (Netherlands).
- The Court's role is to settle, in accordance with international law, legal disputes submitted to it by States and to give advisory opinions on legal questions referred to it by authorized United Nations' organs and specialized agencies.

### Background

- In its submission to the ICJ last year, Mauritius argued it was coerced into giving up the Chagos Islands.
  - That separation was in breach of UN resolution 1514, passed in 1960, which specifically banned the breakup of colonies before independence.
- The UK government argued that the court did not have jurisdiction to hear the case.

### Likely Impact

- **The United Kingdom:** Although the decision by the ICJ is only advisory, the judgment is a blow to the UK's prestige on the world stage.
- **Mauritius:** The government of Mauritius has welcomed the decision and said that it is a "historic moment

Note:

in efforts to bring colonialism to an end, and to promote human rights, self-determination and the international rule of law”.

- **On US Military Base:** The opinion is unlikely to impact the U.S. military base as Mauritius has said in the UN General Assembly that it is committed to the continued operation of the base in Diego Garcia under a long-term framework.

#### Chagos Archipelago

- The Chagos Archipelago, island group in the central Indian Ocean, located about 1,000 miles (1,600 km) south of the southern tip of the Indian subcontinent.
- In the 19<sup>th</sup> century, Chagos were governed from Mauritius, which was a British Colony.
- The UK retained possession of the Chagos archipelago, which includes the strategic US airbase of Diego Garcia, after Mauritius gained its independence in 1968, by paying Mauritius more than £4mn for the islands.
- The U.K. government refers to it as British Indian Ocean Territory or BIOT.
- About 1,500 native islanders were deported from the Diego Garcia island in Chagos archipelago so that it could be leased to the US for the airbase in 1971.
- Mauritius claimed that it was forced to give up the islands in 1965 in exchange for independence, which it gained in 1968.

#### India's Stand

- India has supported Mauritius stand on the Chagos Archipelago.
- India in its submission to ICJ has said that the Chagos Archipelago has been and continues to be with Mauritius and demanded sovereignty over the Chagos Archipelago from Britain.
- India stayed committed to its Indian Ocean neighbor Mauritius, as well as its anti-colonial credentials.

## India bombs Jaish-e-Muhammad Camp in Pakistan

Twelve days after the Pulwama attack, in an aerial surgical strike, the Indian Air Force (IAF) has bombed the Jaish-e-Mohammad's (JeM) terror-training camp in Balakot in the Pakistani province of Khyber Pakhtunkhwa.

- The operation was carried out by 12 Mirage-2000 fighter jets, after intelligence inputs that the said JeM facility is crowded with 200-325 terrorists.

#### India's Statement

- India has said that the strike was based on hard intelligence inputs about the presence of terrorists in the camp.
  - By calling it an intelligence-led operation, the government was trying to send a message to the global audience that the airstrikes were not done at some arbitrarily chosen place but were part of a well-considered action.
- India said that strike, a “non-military preemptive action” was important for two reasons:
  - By calling it non-military, India wanted to reassure everyone that it is not an act against the Pakistani military.
  - The words “preemptive action” were to suggest that the airstrike was not an act of revenge or retribution but an act of self-defense to prevent a likely terror attack in the future.

#### International Response

- India has received support for its air strike from several countries like Australia and France.
  - The countries recognized India's right to self-defense, and asked Pakistan to put an end to operations of terrorist groups established on its territory.
- The US said that India and Pakistan should exercise restraint, and avoid escalation at any cost and avoid further military activity.
- China has said that the two countries should keep restraint and do more to improve bilateral relations.
- With the exception of the Organisation of Islamic Cooperation, there has been no global criticism of India's statement on the strikes.

#### Analysis

- The Indian Air Force's strike on a Jaish-e-Mohammad terror training camp in Pakistan's Balakot delivers a robust but calibrated message that India can strike deep inside Pakistan for its self-defense.
- Airstrikes by the Indian Air Force establishes a new threshold between the two nuclear neighbors for an Indian response to a terror attack.

- This was the **first time Indian fighter jets have crossed Line of Control, since 1971**. Even during the **Kargil war in 1999**, Prime Minister Atal Bihari Vajpayee had drawn a **red line over the IAF crossing the LoC**, to **avoid international recrimination**.
- Along with these surgical strikes, India is also **working diplomatically to isolate Pakistan**.
  - UN Security Council has condemned the Pulwama Attack.
  - Pakistan has been listed in the Financial Action Task Forces (FATF) greylist.
  - India has also withdrawn Most Favoured Nation Status of Pakistan.
  - India has also taken Pakistan to **International Court of Justice** against **death sentence** given to Indian citizen **Kulbhushan Jadhav**.

#### What is a Surgical Strike?

- A surgical strike is a swift and targeted attack on a specific target that aims to neutralize it while ensuring minimum collateral damage to the surrounding areas and civilians.
- India has conducted surgical strikes in 2015 in Myanmar against the insurgent groups and in 2016 in Pakistan-Occupied-Kashmir against terror launch pads along the line of control.
- These attacks can be carried out via air raids, airdropping special operations' teams or a ground operation.

#### The significance of Surgical Strike

- Neutralization of targets with surgical strikes also **prevents escalation to a full-blown war**.
- Surgical strikes are part of **India's Cold Start doctrine** and have proved effective in foiling infiltration bid by terrorist groups across the LoC.

#### Cold Start Doctrine

- The 'Cold Start' doctrine of the Indian Armed Forces envisages swift deployment of troops on the western border within days if a situation of a full-blown war arises.
- This doctrine aims to allow Indian forces to **conduct sustained attacks** while **preventing a nuclear retaliation from Pakistan**. The operation would be carried out by a unified battle group involving various branches of India's military.

- The Cold Start doctrine sought to prepare the army in such a manner that offensive operations could be undertaken within 48 hours of the orders being issued, enabling the Indian troops to take their Pakistani counterparts by surprise.

#### Way Forward

- **Pakistan has denied that the Indian strike caused any damage on the ground**. This may **obviate the need for retaliatory strikes**, or if Pakistan responds this could escalate the situation with a military response.
- Pakistan could also make a break from its past, and begin to **shut down the terror camps on its soil**, which would **win friends internationally** and ensure peace in the region.
- **Surgical strikes are not a one-stop solution**, uprooting terrorism will require sustained efforts by India diplomatically at the global level, which also includes the adoption of **Comprehensive Convention on International Terrorism (CCIT)**.

#### Mirage-2000

- **The Dassault Mirage 2000** is a **French** multirole, single-engine fourth-generation jet fighter manufactured by Dassault Aviation. It was designed in the late 1970s.

#### SPICE 2000

- SPICE stands for '**Smart, Precise Impact and Cost-Effective**' a kit which converts a conventional bomb into a smart munition and is manufactured by Rafael of Israel. The '2000' refers to a bomb of 2,000 pounds (about 1,000 kg).

#### Crystal Maze Mk2

- Crystal Maze Mk2 also called AGM 142 Popeye is a precision-guided munition (PGM).
- The PGM enable the aircraft to release them from stand-off distances while staying away from harm's way and the munitions glide to the target once launched.

#### NETRA AEW&C

- The IAF also deployed the **Israeli Phalcon and indigenous Netra** early warning aircraft to monitor the mission — to direct the aircraft
- IAF also used a **Heron long-range Unmanned Aerial Vehicle** that was used for monitoring and assessment.

## Geneva Convention for Prisoners of War

In response to **Indian action against terrorist's camp in Balakot, Pakistani Airforce attacked Indian military installations.**

- In this engagement, **India lost one MiG 21.** The pilot is missing in action in Pakistan.
- India has cited the **Geneva Conventions, 1949** while demanding the **release of Wing Commander Abhinandan, who is in Pakistan's custody.**

### Geneva Convention

- What are the Geneva Conventions?
  - The 1949 Geneva Conventions are a set of international treaties that ensure that **warring parties conduct themselves in a humane way with non-combatants** such as **civilians and medical personnels**, as well as with **combatants who are no longer actively engaged in fighting**, such as **prisoners of war (POW)**, and **wounded or sick soldiers.**
  - All countries are signatories to the Geneva Conventions.
- Does the captured pilot count as a prisoner of war?
  - The provisions of the conventions apply in **peacetime situations, in declared wars, and in conflicts that are not recognized as war by one or more of the parties.**
  - India has said **its airstrikes** were a **"non-military"** intelligence-led operation — both sides are bound by the Geneva Conventions. **This means the IAF officer is a prisoner of war, and his treatment has to be in accordance with the provisions for PoWs under the Geneva Conventions.**
- **What rights is a PoW entitled to?**
  - **Article 14 of the Convention** lays down that PoWs are "entitled to in all circumstances to respect for their persons and their honour".
  - **In captivity, a PoW must not be forced to provide information of any kind under "physical or mental torture, nor any other form of coercion".** Refusal to answer questions should not invite

punishment. A PoW must be protected from exposure to fighting.

- Use of PoWs as hostages or human shields is prohibited, and a PoW has to be given the same access to safety and evacuation facilities as those affiliated to the detaining power.
- **Access to health facilities, prayer, recreation,** and exercise are also written into the Convention. The detaining power has to facilitate correspondence between the PoW and his family and must ensure that this is done without delays. A PoW is also entitled to receive books or care packages from the outside world.
- **What do the provisions say about the release of prisoners?**
  - Parties to the conflict "are bound to send back" or repatriate PoWs, regardless of rank, who are seriously wounded or sick, after having cared for them until they are fit to travel". The conflicting parties are expected to write into any agreement they may reach to end hostilities the expeditious return of PoWs. Parties to the conflict can also arrive at special arrangements for the improvement of the conditions of the internment of PoWs, or for their release and repatriation.
  - At the end of the 1971 war, India had more than 80,000 Pakistani troops who had surrendered to the Indian Army after the liberation of Bangladesh. India agreed to release them under the Shimla Agreement of 1972.
- In such situations, **who monitors whether the Geneva Conventions are being followed?**
  - The **Geneva Conventions have a system of "Protecting Powers" who ensure that the provisions of the conventions are being followed by the parties in a conflict.** In theory, each side must designate states that are not the party to the conflict as their "Protecting Powers".
    - In practice, the International Committee of the Red Cross (ICRC) usually plays this role.
  - During the **Kargil War**, Pakistan **returned Flt Lt Nachiketa**, who was captured after ejecting from his burning Mi27, after keeping him for eight days. This was after **intense diplomatic efforts by India.** Another PoW, Squadron **Ldr Ajay Ahuja**, was **killed in captivity.**

Note:

## **National Emergency Declared in the United States**

On February 15, 2019, President of the United States Donald Trump declared a **National Emergency Concerning the Southern Border of the United States.**

- President Donald Trump, citing an **“invasion” of drugs and criminals, declared a national emergency to fund construction of a border wall along US-Mexico Border.**

- US President can now **bypass the opposition in Congress** (Parliament in the United States) and can **redirect billions of dollars in federal funds to build the wall.**

### ***Emergency Powers in the United States***

- Neither the term “emergency” nor any comparable term appears in the text of the United States Constitution.
- The President in the United States has Emergency Powers derived from the **National Emergencies Act, 1976.**



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# Science and Technology

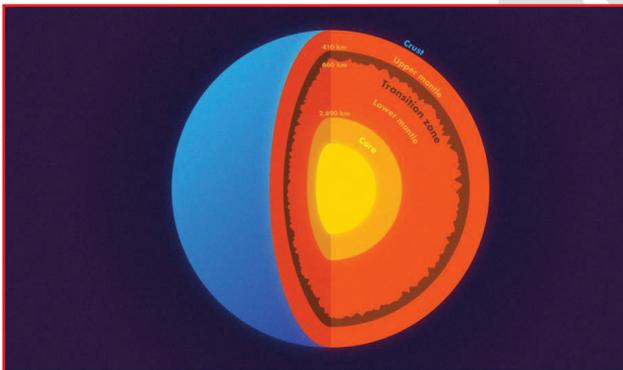
## Highlights

- Massive Mountains Discovered under Earth's Crust (25)
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## Massive Mountains Discovered under Earth's Crust

Scientists have discovered massive mountains in the Earth's mantle.

- The mountains were located **at the boundary of the outer and lower mantle at a depth of 660 km.**
- Lacking a formal name for this layer, the researchers simply call it **"the 660-km boundary."**



### How was it Discovered?

- Scientists have used the **earthquake data from the 8.2 magnitude earthquake which shook Bolivia in 1994.**
- This earthquake was the second-largest deep earthquake ever recorded, with a focal point estimated at a depth of 650 kilometers.
- **This earthquake was also the first big earthquake to be measured on a modern seismic network, providing researchers with unprecedented data.**
- Data was gathered from earthquakes waves that travel in all directions and can travel through the core to the other side of the planet.

### Findings

- From earthquake waves, the researchers came to know that the **upper and lower mantle boundary at 660 km depth is rough.**
- The researchers also examined a layer 410 km down, at the top of the mid-mantle "transition zone," and the surface is not similarly rough.

### Significance

- Due to technical limitations, scientists were not able to determine the height of these mountains, but there's a chance that these mountains are **bigger than anything on the surface of the Earth.**
- This discovery is also important for understanding **how the earth formed and continues to function.**

### Interior of the Earth

The Earth has three layers: **a crust, mantle, and core,** which is subdivided into an inner and outer core.

### Information about Interior of the Earth

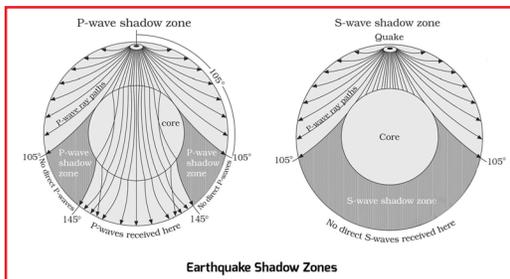
- There are two sources of information for scientists about the interior of the earth: Direct and Indirect.
- **Direct Sources**
  - **Surface rock** or the rocks from **mining.**
  - **Deep Ocean Drilling Projects:** The deepest drill is at Kola, in the Arctic Ocean, which has reached a depth of 12 km.
  - **Volcanic eruptions.**
- **Indirect Sources**
  - **Meteors** from space.
  - **Gravitation, magnetic field.**

Note:

- **Seismic activity:** Seismic activity is one of the most important sources of information about the interior of the earth.

### Earthquake

- An earthquake in simple words is **shaking of the earth**. It is a natural event. It is caused due to the release of energy, which generates waves that travel in all directions.
- **Focus and Epicenter**
  - The release of energy occurs along a fault. The **point where the energy is released** is called the **focus of an earthquake**.
  - The energy waves traveling in different directions reach the surface of the earth. The **point on the surface, nearest to the focus, is called Epicenter**.
- **Earthquake Waves**
  - Earthquake waves are basically of two types — body waves and surface waves.
  - **Body waves**
    - Body waves are generated due to the release of energy at the focus and move in all directions traveling through the body of the earth. Hence, the name body waves.
    - There are **two types of body waves**. These are called P and S-waves.
    - **P-waves:** P-waves move faster and are the first to arrive at the surface. These are also called **primary waves**.
    - The P-waves are similar to sound waves. **They travel through gaseous, liquid and solid materials.**



- **S-waves:** S-waves arrive at the surface with some time lag. These are called **secondary waves**.
- An important fact about S-waves is that they **can travel only through solid materials**.
- This characteristic of the S-waves is quite important. It has **helped scientists to understand the structure of the interior of the earth**.

- **Surface waves**
  - The **body waves interact with the surface rocks** and generate a new set of waves called surface waves.

### Shadow Zones

Earthquake waves get recorded in seismographs located at far off locations. However, there exist some specific areas where the P and S waves are not reported. Such a zone is called the 'shadow zone'.

## China's Solar Power Station in Space

- China is planning to build a solar power station in space.
- China has started construction of an experimental base in the **western Chinese city Chongqing**.
- Initially, China plans to develop a smaller power station in the stratosphere between 2021 and 2025, a 1 megawatt-level solar facility in space by 2030, and eventually larger generators.
- China is also planning to build its **own space station by 2022**.
- The space station is named as **Tiangong**, or Heavenly Palace, which will have a core module and two other modules for experiments.
- The space station will be able to carry three people, with a designed life cycle of at least 10 years.
- The facility would be used for scientific research in a dozen areas including biology, physics, and material sciences.

### New-Universe Map

- The scientists have published a **new map of the night sky** and discovered hundreds of thousands of galaxies which were previously unknown.
- The discovery was made using the **Low-frequency Array (LOFAR) telescope**.
- LOFAR can detect light sources which optical instruments **cannot see using radio astronomy**.
- The discovery will shed new light on some of the Universe's secrets, including the physics of black holes and how clusters of galaxies evolve.
- **Radio Astronomy:** Radio astronomy allows scientists to detect radiation **produced when massive celestial objects interact**.

Note:

**LOFAR Telescope**

- The LOFAR telescope is made up of a network of radio antenna across seven countries in Europe, forming the equivalent of a 1,300-km diameter satellite dish.
- LOFAR is developed by a consortium of knowledge institutes, universities and industrial parties, led by ASTRON-Netherlands Institute for Radio Astronomy.

**Digital India Awards**

- The **National Informatics Centre (NIC)** to organize the **fifth edition** of Digital India Awards on February 22, 2019.
- The Digital India Awards recognize the digital presence and e-Governance efforts of various Government institutions across the country.
  - Central Government Ministries/Departments/ Offices/Institutions, State Government Departments/ Offices/Institutions, District Administrations and Indian Missions Abroad are eligible to apply for the Digital India Awards.
- The awards instituted in 2009 are one of a kind in India for honoring the efforts of different Government entities in the digital realm.
- Since its inception the Digital India Awards have seen four editions, beginning from 2010, and biennially being conferred in 2012, 2014 & 2016.

**National Portal of India**

- The Portal has been developed as a Mission Mode Project (MMP) under the National E-Governance Plan (NEGP) of the Government. The portal was launched in November 2005.
- It is designed, developed and hosted by the National Informatics Centre (NIC), a premier ICT organization of the Government of India under the aegis of the Ministry of Electronics & Information Technology.
- The objective behind the Portal is to provide a single window access to the information and services being provided by the Indian Government for citizens and other stakeholders.

**National Informatics Centre**

National Informatics Centre (NIC) is a premiere S&T institution of the Government of India, established in 1976, for providing e-Government / e-Governance Solutions adopting best practices, integrated services and global solutions in Government Sector.

**National e-Governance Plan (NeGP)**

- The Government approved the National e-Governance Plan (NeGP), comprising of 27 Mission Mode Projects and 8 components in 2006.
- In the year 2011, 4 projects - Health, Education, PDS and Posts were introduced to make the list of 27 MMPs to 31 Mission Mode Projects (MMPs).
- Within NeGP, "mission mode" implies that projects have clearly defined objectives, scopes, and implementation timelines and milestones, as well as measurable outcomes and service levels.
- The 31 mission mode projects (MMPs) are further classified as state, central or integrated projects. Each state government can also define five MMPs specific to its individual needs.

**BharatNet**

- Recently the **Digital Communications Commission (DCC)**, the inter-ministerial panel of the **Department of Telecommunications (DoT)**, has given in-principle nod for **monetisation of fibre assets of BharatNet**.
- **These assets will be offered to the private telcos** through auction, **lease for 20 years** or by outright sale.
- This comes against the backdrop of concerns over **poor utilization of digital infrastructure** that has been **created across more than 100,000 gram panchayats** in the country.
- Earlier, the Telecom Regulatory Authority of India (TRAI) had also urged the government to sell off these fibre assets to private players.
- **BharatNet is a flagship mission to connect 250,000 gram panchayats with broadband** being implemented by Bharat Broadband Network Ltd (BBNL), a special purpose vehicle set up under DoT in February 2012.
- National Optical Fibre Network (NOFN) which was launched in October, 2011 was renamed as Bharat Net Project in 2015.

**DNS Server to be Launched**

The government will launch a **public Domain Name Server (DNS)** aimed at providing a **faster and more secure browsing experience** for Internet users in the country, while ensuring that **citizens' data is stored locally**.

- The main objective of bringing country's own public DNS is to **ensure availability, particularly for smaller**

### Internet Service Providers (ISPs) who don't have credible DNS.

- A user will be **free to choose any DNS** and they need **not compulsorily need to shift to India public DNS**.
- The DNS roll out will be **completed in the next four to six months and it will be executed by National Informatics Centre (NIC)**.

#### Domain Name Server

- DNS is a system which translates the domain names entered in a browser to the Internet Protocol (IP) addresses required to access the respective sites. E.g.:
  - When one types a web address (say drishtiias.com), the Internet Service Provider views the DNS associated with the domain name, translates it into a machine friendly IP address (for example 296.199.224.70 is the IP for drishtiias.com) and directs the Internet connection to the correct website.
- It can also be termed as Internet's equivalent of a phone book.
- The Centre has also launched a **new email platform for all government employees** including those in states and Union Territories.
- The new platform is an **upgraded version with enhanced inbuilt security features** compared to the earlier created by the **National Informatics Centre (NIC)** and has a capability to host as many as 5 million users that can be scaled up further if needed.
- These initiatives are a part of the Government's initiatives for a new and robust platform in the wake of critical digital services being delivered online requiring enhanced security to discourage cyber-attacks and a quicker site loading time.

## Space Flight of First UAE Astronaut

- The **first astronaut from the United Arab Emirates (UAE)** will head to the **International Space Station (ISS)** via the **Russian Soyuz rocket on 25<sup>th</sup> September, 2019**.
- After this UAE will join the list of **eighteen countries that have sent their people to ISS**.
- **The pioneering mission** to the ISS is part of the **UAE Astronaut Programme** that aims to fulfil the UAE's **aspirations** in taking part in **scientific missions** and **manned space exploration missions**.

- In 2018, UAE launched its **first locally made satellite KhalifaSat from Japan**.
  - It has planned a **Mars probe** named as **Hope Mars Mission**, for the next year.

#### International Space Station (ISS)

- ISS is a habitable artificial satellite - the single largest man-made structure in low earth orbit.
- It circles the Earth in roughly 92 minutes and completes 15.5 orbits per day.
- The ISS programme is a joint project between five participating space agencies: NASA (United States), Roscosmos (Russia), JAXA (Japan), ESA (Europe), and CSA (Canada) but its ownership and use has been established by intergovernmental treaties and agreements.
- Its first component was launched into orbit in 1998 and its development and assembly continues, with components scheduled for launch this year.
- It serves as a microgravity and space environment research laboratory in which crew members conduct experiments in biology, human biology, physics, astronomy, meteorology, and other fields.
- Continuous presence at ISS has resulted into the longest continuous human presence in the low earth orbit.
- It is expected to operate until 2030.

## Gynandromorphs

- According to Scientists, the **study of gynandromorphs** could offer clues as to **why some human diseases strike one gender more than the other**.
- **Gynander** or **gynandromorphs** are the **organisms** in which the **body consists of both male and female parts**.
- The term is derived from the **Greek words (gyne = woman; aner = man and morphe = form)**. Thus, in these animals one part of the body shows female and the other part male features. The phenomenon has been **documented in birds, crustaceans and butterflies**.
- However, it still remains a mystery as to how gynandromorphs are born. **Gynandromorphs occur naturally, usually resulting from a random genetic error**.
- These instances of **split-sex animals and insects** could offer clues to why some human diseases strike one sex more than the other.

Note:

- Diseases like **multiple sclerosis, obesity**, metabolic syndrome, autoimmune disease, Alzheimer's, even ageing **differs by sex**. **Few decades back, scientists** did not think that **sex chromosomes** played any role in causing sex differences in these **diseases**.

## **Climate-Smart Varieties of Rice**

- Recently, the **National Rice Research Institute (NRRI)**, has released **four new rice varieties**, including **two high-protein** and **two climate-smart varieties**.
- The four new varieties comprises of:
  - **Two high-protein rice varieties (CR Dhan 310 and CR Dhan 311)** and
  - **Two climate-smart varieties (CR Dhan 801 and CR Dhan 802)**, which are **tolerant** to both **submergence** and **drought** and few biotic stresses to face the challenges of climate change.
- NRRI also developed a **Mobile App 'riceXpert'** to provide **information** to farmers in real time besides facilitating the **flow of information from scientist to farmers**.

### **National Rice Research Institute (NRRI)**

- NRRI is the nodal agency for planning, implementation and monitoring of the **Bringing Green Revolution in Eastern India** programme.

- It was established in 1946 and subsequently the administrative control of the Institute was transferred to the Indian Council of Agricultural Research (ICAR) in 1966.
- It is located at Cuttack in the state of Odisha.

## **National Science Day**

- **Every year 28<sup>th</sup> of February** is celebrated as **National Science Day in India**.
- On this day in **1928, Sir C V Raman discovered a phenomenon of scattering of photons which was later known as 'Raman Effect' after his name**.
- In 1930, he received **Nobel Prize** for this remarkable discovery. This was the **first Nobel Prize for India** in the **field of Science**.
- The theme for the **National Science Day 2019** is **"Science for people and people for science"**.

### **Raman Effect**

- Raman effect is the inelastic scattering of a photon by molecules which are excited to higher vibrational or rotational energy levels. It is also called Raman scattering.
- The Raman effect forms the basis for Raman spectroscopy which is used by chemists and physicists to gain information about materials.



# Environment and Ecology

## Highlights

- Western Disturbance (30)
- Grid-Connected Rooftop Solar Programme (30)
- Great Barrier Reef (31)
- The First 'Climate Change Extinction' (32)
- Punjab's Blackbuck Under Threat (32)
- Super-Efficient Air Conditioning programme launched by EESL (32)
- Bandipur National Park (33)
- Stratocumulus Clouds (33)
- Looming Threat to Food Security (34)

## Western Disturbance

- According to India Meteorological Department (IMD), this winter season's most powerful Western Disturbance (WD) is all set to hit north India.
- Already, six to seven WDs have affected north India in February 2019, while a few more western disturbances are expected by March 1.
- WD or the areas of "**disturbed air pressure**" traveling to India from the **west** are a **regular feature through the winter season**.
- These are basically "**extra-tropical storms**" or **low pressure systems** originating **outside the tropical regions**.
- Unlike a tropical cyclone which is formed in the lower atmosphere, a temperate cyclone (like WDs) is **usually formed in the upper atmosphere**. Therefore, they can **travel greater distances and can hence affect large areas of land** (sometimes can travel eastwards along the sub-Himalayan belt and reach up to Arunachal Pradesh).
- The factors that determine the strength of WDs are the **location and intensity of the jet stream** and the **amount of moisture being carried by the low-pressure system**.
- The **westerly jet streams (massive fast winds traversing the earth from west to east)** carry them.
- The rain and snow they bring in their wake to north India and neighbouring regions is formed from the **moisture they carry from the Atlantic Ocean or the Mediterranean Sea**.
- They help **sustain Himalayan glaciers** and the local ecology and **provide nourishment to winter**

**crops (Rabi Crops- wheat, barley, mustard, gram, lentil, etc.).**

- They are also **associated with cloudy skies** and an **increase in night-time temperatures** in parts of north India. They can also cause strong winds that help **disperse suspended pollutants** in the smog-filled cities of the region, including New Delhi.

## Grid-Connected Rooftop Solar Programme

The union cabinet has approved **Phase-II of Grid Connected Rooftop Solar Programme** for achieving a cumulative capacity of 40,000 MW from Rooftop Solar Projects by the year 2022

- Central Financial Assistance (CFA) under residential category will be provided for 4000 MW capacity and the same will be provided on the basis of benchmark cost or tender cost, whichever is lower.
- Central financial support will not be available for other categories i.e., institutional, educational, social, government, commercial, industrial, etc.
- **The increased role of Distribution Companies**
  - Under Phase-II Programme, performance-based incentives will be provided to DISCOMs based on capacity achieved in a financial year.
  - DISCOMs and its local offices shall be the nodal points for implementation of the programme.

### Benefits of Programme

- **Environment:** The Programmes will have a substantial environmental impact in terms of savings of CO<sub>2</sub>

Note:

emission. The addition of 38 GW solar rooftop plants under Phase-II by the year 2022 will result in a CO<sub>2</sub> emission reduction of about 45.6 tonnes per year.

- **Employment Generation:** The programme is likely to generate employment opportunity for skilled and unskilled workers for the addition of 38GW by the year 2022.

### Grid-Connected

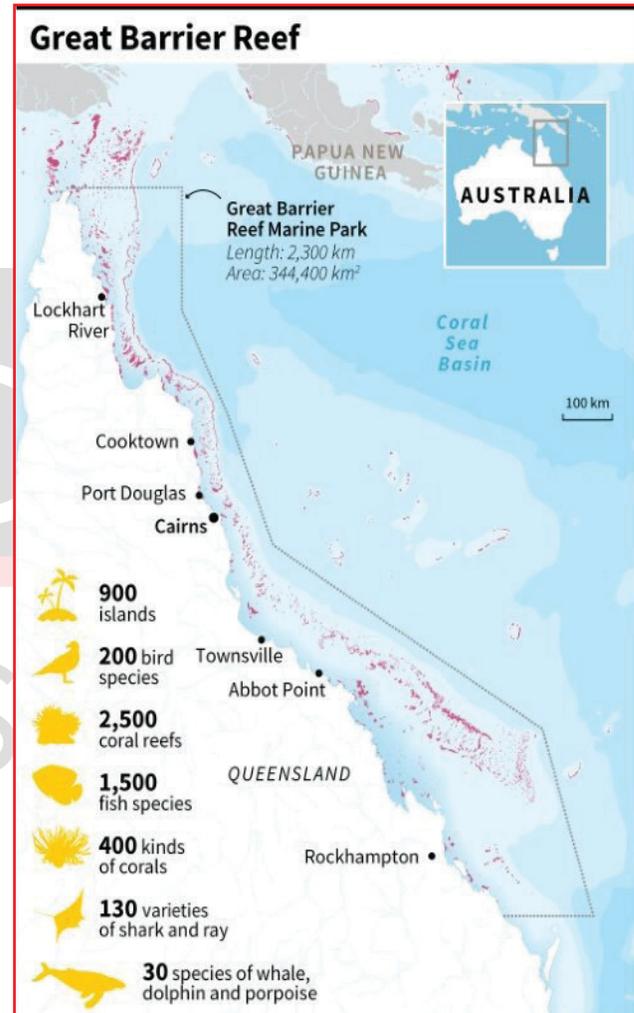
#### Rooftop Solar Programme

- In grid-connected rooftop or small SPV (Solar PhotoVoltaic) system, the DC power generated from the SPV panel is converted to AC power using the power conditioning unit and is fed to the grid.
- The major objective of the programme includes:
  - To promote the grid-connected SPV rooftop and small SPV power generating plants among the residential, community, institutional, industrial and commercial establishments.
  - To mitigate the dependence on fossil fuel based electricity generation and encourage environment-friendly Solar electricity generation.
  - To create an enabling environment for investment in the solar energy sector by the private sector, state government and the individuals.
  - To create an enabling environment for the supply of solar power from rooftop and small plants to the grid.

## Great Barrier Reef

- Recent runoff from floods in **northern Australia** is flowing onto parts of the Barrier Reef, **starving coral of light** and providing fodder for the **predatory crown-of-thorns starfish**.
- The predatory crown-of-thorns starfish, which eat coral, have also proliferated on the reef **due to pollution and agricultural runoff**.
- Further, these floods are **causing algae to grow** in some areas which provides a brilliant food source to **allow the population of starfish to thrive**.
- Coral reef and seagrass need **light to maintain their growth and health**. The floods have spilled sediment onto the reef which has reduced water quality and much-needed sunlight.

- It can be noted that the reef has already suffered from **back-to-back coral bleaching in 2016 and 2017**, where swathes have been killed by rising sea temperatures linked to climate change.
- The Great Barrier Reef is the **world's largest coral reef system** composed of over 2,900 individual reefs and 900 islands stretching for over 2,300 kilometres over an area of approximately 344,400 square kilometres (133,000 sq mi).



- The reef is located in the Coral Sea, off the coast of Queensland, Australia.
- The Great Barrier Reef can be seen from outer space and is the world's biggest single structure made by living organisms. This reef structure is composed of and **built by billions of tiny organisms, known as coral polyps**.
- It supports a wide diversity of life and was selected as a **World Heritage Site in 1981**.

Note:

## The First 'Climate Change Extinction'

Recently the government of **Australia has officially declared the first known extinction of a mammal** as a result of human-induced climate change.



- The rat-like **Bramble Cay melomys**, whose only known habitat was a **tiny sand island in the Torres Strait**, near the coast of Papua New Guinea (PNG) has not been spotted in a decade.
- The key factor in its disappearance was the **dramatic habitat loss because of repeated ocean inundation of the cay** (a small, low-elevation, sandy island on the surface of a coral reef).
- The Melomys, considered the **Great Barrier Reef's** only endemic mammal species, **was first discovered on the cay in 1845** by Europeans who shot them for sport.

## Punjab's Blackbuck Under Threat

- **Blackbuck** is fighting for its existence at the **Abohar Wildlife Sanctuary (AWS)** located in the Fazilka District of Punjab which is an open sanctuary, spread across private land in several villages.
- Blackbuck's status is '**Least Concern**' species (IUCN Red List) but it faces a severe threat from **stray cattle, attacks by stray dogs, barbed wire and habitat fragmentation** due to change in land use and cropping patterns over the past few years.

### The IUCN Red List

- The International Union for Conservation of Nature (IUCN)'s Red List of Threatened Species was established in 1964.
- It is a critical indicator of the health of the world's biodiversity.

- The blackbuck was notified as the **State animal of Punjab** in 1989 and its presence in the State is confined to AWS due to the unique habitat of semi-arid plains consisting agricultural fields, intermittent fallow-barren lands, scattered sand dunes, sand mounds, and ridges.

## Super-Efficient Air Conditioning programme launched by EESL

**Energy Efficiency Services Limited (EESL)**, a joint venture of four **National Public Sector Enterprises under Ministry of Power**, Government of India, launched its **Super-Efficient Air Conditioning Programme** for residential and institutional consumers.

- These Super-Efficient Air Conditioners are **40% more efficient than**, but priced comparably with, **the 3-star ACs currently available in the market**.
- Besides promoting energy efficiency, the Super-Efficient AC programme will also help to **reduce the peak power demand** enabling energy security and sustainability.
- The programme directly addresses the prospect of the nearly **four-fold increase in energy consumption from buildings and cooling appliances in India by 2032**, while also enabling achievement of India's targets under the **Kigali and Paris Agreements**.

### Energy Efficiency Services Limited

- Energy Efficiency Services Limited (EESL), is a joint venture of four National Public Sector Enterprises—NTPC Limited, Power Finance Corporation Ltd (PFC), REC and POWERGRID, and was set up under Ministry of Power.
- EESL aims to create market access for efficient and transformative solutions that create a win win situation for every stakeholder.
- EESL has distributed over 29 crore LED bulbs and retrofitted 50 lakh LED streetlights across India through self-sustaining commercial models.
- It aims to explore new opportunities in overseas market for diversification of its portfolio.
  - EESL has begun its operations in UK, South Asia and South-East Asia.

- This programme is partially supported by a grant from the **Global Environment Facility (GEF)**.
  - Further, **Asian Development Bank (ADB)** is providing necessary grant support and loan while **United Nations Environment (UNEP)** is providing technical assistance support to the Super-Efficient AC programme.

## Bandipur National Park

- Recently, **NASA's Fire Information for Resource Management System (NASA-FIRMS)** has detected 32 fire incidents in **Himavad Gopaldaswamy Betta** range of Bandipur National Park.
- **Bandipur National Park** is located between where the **Deccan Plateau** meets the **Western Ghats** in **Karnataka**.
- It is **part** of the **Nilgiri Biosphere Reserve** with the **adjoining Nagarhole National Park, Mudumalai National Park, and Wayanad Wildlife Sanctuary**.
- It has a **variety of biomes** including **dry deciduous forests moist deciduous forests and shrublands**.
- The park is **flanked by the Kabini river** in the north and the **Moyar river** in the south. The **Nugu river** runs through the park.



### NASA's Fire Information for Resource Management System (FIRMS)

FIRMS distributes Near-Real-Time (NRT) active fire data within 3 hours of satellite overpass from NASA's Moderate Resolution Imaging Spectroradiometer (MODIS) and NASA's Visible Infrared Imaging Radiometer Suite (VIIRS).

## Stratocumulus Clouds

- A recent study has warned that increasing **Carbon Dioxide levels** can **warm the Earth dramatically** and can lead to **hothouse conditions**.
- The **Stratocumulus clouds** that **reflects sunlight back into space** could break up and **vanish** if **CO<sub>2</sub> in the atmosphere triples**.
- Stratocumulus clouds cover about **20% of subtropical oceans** and **when they disappear**, Earth **warms dramatically**, by about **eight degrees**. This is in addition to the global warming that comes from enhanced greenhouse concentrations alone.
- A temperature increase of that magnitude **would melt polar ice and lift sea levels dozens of meters**.

### Types of Clouds

- According to their height, expanse, density and transparency or opaqueness clouds are grouped under four types:
  - **Cirrus:** Cirrus clouds are formed at high altitudes (8,000 - 12,000m). They are thin and detached clouds having a feathery appearance. They are always white in colour.
  - **Cumulus:** Cumulus clouds look like cotton wool. They are formed at a height of 4,000 - 7,000 m. They exist in patches and can be seen scattered here and there. They have a flat base.
  - **Stratus:** These are layered clouds covering large portions of the sky. These clouds are generally formed either due to loss of heat or due to the mixing of air masses with different temperatures.
  - **Nimbus:** Nimbus clouds are black or dark gray. They form at middle levels or very near to the surface of the earth. These are extremely dense and opaque to the rays of the sun.
- A combination of these four basic types can give rise to the following types of clouds:
  - High clouds – cirrus, cirrostratus, cirrocumulus;
  - Middle clouds – altostratus and altocumulus;
  - Low clouds – stratocumulus and nimbostratus and clouds with extensive vertical development – cumulus and cumulonimbus.

Note:

## Looming Threat to Food Security

A recent report titled “State of the World’s Biodiversity for Food and Agriculture” has warned of a growing threat to global food security as a result of severe loss of biodiversity — that is, plants, animals and microorganisms that contribute to food production.

➤ It is released by the Food and Agriculture Organisation (FAO) of the United Nations.

### Findings

- India was placed among the countries with a very high threat to soil biodiversity on an index that was created by combining eight stressors of soil biodiversity, which include loss of above-ground diversity, overgrazing, among others.
  - Soil biota is critical for release of nutrients to the crops as well as organic matter formation. With climate change soil biota will be impacted even more and there will be further loss of nutrients causing collapse of agriculture in some places.
- The global map shows almost all of India falls in the highly stressed zone along with some parts of Africa, Americas and Asia.
- The report also highlights the loss of biological control agents (BCAs) — insects and pests — as an important factor in declining biodiversity.
  - India has noted a decline of parasitoid wasps and parasitoid flies, which play an important role in biological pest control.
  - Bangladesh has reported a decline in spiders and predatory insects in fields.
  - Nepal has mentioned a general decline in the diversity of the natural enemies of pests.
  - The United States has reported a decline of almost 40% in its grassland bird index between 1968 and 2014.
- On climate change, it notes that extreme weather events are causing major disruptions to species distribution and yields.
  - For example, rising temperatures in the tropics are pushing coffee growing towards higher elevations in mountainous areas.
  - Frequent cold or windy days in spring can also disrupt pollination process.

- Egypt has reported that rising temperatures will lead to northwards shifts in the range of fish species, with impacts on fishery production.

### Background

- Biodiversity in agriculture is crucial to adapting to climate change.
  - E.g.: Livestock diversity is a buffer against crop failure.
    - In India, Small land holders and landless rural dwellers manage 75% of livestock resources and obtain nearly half of their income from them.
- Risk can be reduced, for example, by raising species, breeds or varieties that are well adapted to coping with shocks such as droughts or disease outbreaks or by raising a number of different types of crops, livestock or aquatic organisms so as to increase the likelihood that at least some will survive such events.
- Before the Green Revolution [of the 1960s], India was growing a large biodiversity of crops on a landscape level. There were different cropping and tree systems at a farm level. Even if there was a failure, all crops would not be affected at the same time.
- However, specialisation of crops for high yields has made farmers vulnerable. Crop failures are common when there is natural disaster or pest attack.

### Food and Agriculture Organization (FAO)

- FAO is an agency of the United Nations that leads international efforts to defeat hunger.
- It is also a source of knowledge and information, and helps developing countries and countries in transition modernize and improve agriculture, forestry and fisheries practices, ensuring good nutrition and food security for all.
- Formation: 16 October 1945, in Quebec City, Canada
- Headquarters: Rome, Italy
- Every year, World Food Day (Theme for 2018-Zero Hunger) is celebrated on October 16 to commemorate the founding of the Food and Agriculture Organisation (FAO) of United Nations in the year 1945.
- The Sustainable Development Goal (SDG-2) also aims to “End hunger, achieve food security and improved nutrition and promote sustainable agriculture” by 2030.



Note:

# Art & Culture

## Highlights

- Birth Anniversary of Guru Ravidas (35)
- Attukal Pongala (35)
- 18th Century Copy of Gita Govinda (35)
- Tagore Cultural Harmony Award (36)
- National War Memorial (36)
- Angkor, Cambodia, a City of Towering Temples in the Forest (37)
- Apatani Tribes in Arunachal Pradesh (37)

## Birth Anniversary of Guru Ravidas

- Recently, birth anniversary of **Guru Ravidas** was observed in the country.
- Ravidas Jayanti is celebrated on Magh Purnima, the full moon day in the month of Magh according to the Hindu lunar calendar.
- Guru Ravidas was a 14<sup>th</sup> century saint and reformer of the **Bhakti movement** in North India.
- It is believed that he was born in Varanasi in a cobbler's family.
- He gained prominence due to his belief in one God and his unbiased religious poems.
- He dedicated his whole life to the abolition of the caste system and openly despised the notion of a Brahminical society.
- His devotional songs made an instant impact on the Bhakti Movement and around **41 of his poems** were included in '**Guru Granth Sahib**', the religious text of the Sikhs.

## Attukal Pongala

- The Attukal Pongala held in **Attukal Temple, Thiruvananthapuram, Kerala** and is the largest congregation of women for a festival in the world.



- Pongala, which means 'to boil over', is the ritual in which women prepare sweet payasam (a pudding made from rice, jaggery, coconut and plantains cooked together) and offer it to the Goddess or 'Bhagavathy'.
- The ritual can **only be performed by women** and the streets of the city are known to be jam-packed with faithful devotees during the time of the festival.
- The Goddess-fondly referred to as 'Attukalamma' is said to be appeased by this ritual.
- The Attukal Pongala entered the **Guinness Book of Records as the largest gathering of women in 2009.**

## 18<sup>th</sup> Century Copy of Gita Govinda

- **Victoria Memorial Hall in Kolkata** has put on display one of its **oldest manuscripts, a handwritten 18<sup>th</sup>-century copy of Gita Govinda**, to mark the **International Mother Language Day on 21 February.**
- Gita Govinda, an important text of the Bhakti Movement, **depicts the relationship between Lord Krishna and his consort Radha.**
- **Jayadeva** (12 century A.D.) is the last great name in **Sanskrit poetry**, who wrote the **lyric poetry** Gitagovinda to **describe every phase of love between Krishna and Radha – longing, jealousy, hope, disappointment, anger, reconciliation and fruition – in picturesque lyrical language.**
- **The songs describe the beauty of nature**, which plays a prominent part in the description of human love.
- Like many medieval texts, Gita Govinda was translated for centuries. These manuscripts were copied by hand in **beautiful handwriting** much **before** the advent of the **printing press.**

Note:

- The form of imagery in the illustrated texts is very similar to the **Bengal Pat Paintings** and the **Bengal School of Art**, which evolved a century after the manuscripts were written.

### Bengal Pat Paintings

- Pata Painting (pattachitra) is a traditional art form characterised by religious and social motifs and imageries.
- Pata is a Bangla word evolved from the Sanskrit patta meaning cloth.
- An artwork drawn on a piece of silk or cotton or any other fabric portraying traditional motifs of religion and society is called pat art.
- Pattachitras are made in two formats: the vertically scrolled paintings and the horizontally scrolled ones, both referred to as Jodano or Gutano Pata and the smaller square or rectangular formats, known as Chouko Pata. Chouko Pata are painted on square pata or canvas.
- An urban incarnation of the Chouko Pata in nineteenth century Kolkata (in the neighbourhood of the famous Kali temple at Kalighat) was the Kalighat Pata or Kalighat paintings.
  - Kalighat Pata is an interesting example of how a rural folk art form reinvents itself in an urban milieu.
- As a folk art it makes an important element of Bengal cultural heritage.

### Bagru Block Printing

- **Union Council Minister Smriti Irani** inaugurated the '**Titanwala Museum**' in Bagru village of **Rajasthan** that showcases the **Chippa community's** (literally meaning people who stamp or print) **Hand-block printing**.
- **Bagru printing** is one of the **traditional techniques of printing with natural colour followed by the chippas** of a remote place of Rajasthan.
- Bagru printers use a technique called dabu in which a mixture of **black clay, acacia gum, spoiled wheat flour, limestone** is printed onto the fabric. The fabric can then be dyed and left in the sun to dry.



## Tagore Cultural Harmony Award

- Recently, the President of India has presented the Tagore Award for Cultural Harmony.
- The award was given to **Shri Rajkumar Singhajit Singh (scholar of Manipuri dance)**, **Chhayanaut (a cultural organization of Bangladesh)** and **Shri Ram Sutar Vanji (a renowned sculptor)** for the years 2014, 2015 & 2016 respectively.
- The Tagore Award for Cultural Harmony was **instituted by the Government of India from 2012 recognizing the contributions made by Rabindranath Tagore to humanity** at large with his works and ideas, as part of the Commemoration of his 150<sup>th</sup> Birth Anniversary in 2012, for promoting values of Cultural Harmony.
- The Award is **open to all persons regardless of nationality**, race, language, caste, creed or gender.

## National War Memorial

- Recently, Prime Minister has **inaugurated National War Memorial in New Delhi**.
- The memorial is located at the **India Gate complex in New Delhi**.
- The **layout of the structure comprises** four concentric circles, named:
  - the "**Amar Chakra**" or Circle of Immortality,
  - the "**Veerta Chakra**" or Circle of Bravery,
  - the "**Tyag Chakra**" or Circle of Sacrifice and
  - the "**Rakshak Chakra**" or Circle of Protection.
- The busts of **21 awardees of the Param Veer Chakra** are also installed at the Param Yoddha Sthal.
- The **National War Memorial also commemorates the soldiers** who participated and made supreme sacrifices in **United Nations peace-keeping missions, Humanitarian Assistance Disaster Relief (HADR) operations, counterinsurgency operations and Low-Intensity Conflict Operations (LICO)**.
- **Since Independence**, more than **25,000 personnel** have been martyred during the **India-China War in 1962, the Indo-Pakistan wars in 1947, 1965 and 1971, the Indian Peace Keeping Force operations in Sri Lanka and the conflict in Kargil in 1999**.
- The **proposal** for a National War Memorial was first **made in the 1960s**.

Note:

- In 2015, the cabinet gave in-principle approval for war memorial construction at India Gate Complex, New Delhi.
- In 2016, after an international competition to design the Memorial, **Chennai-based architecture company WeBe Design Lab** was selected.

**RAKSHAK CHAKRA**

Outermost circle comprising rows of over 600 trees, symbolising "the soldiers who ensure the territorial integrity of the nation, round the clock".

**AMAR CHAKRA**

Innermost circle; at its centre stands a 15 m granite obelisk topped by a bronze Lion Capital. The obelisk has a hollow centre, where the PM'll an Eternal Flame.

**VEERTA CHAKRA**

A covered gallery. Bronze murals depict Battles of Longewala, Cangoagar (1971), Ititwal (1947), Resang La (1962), Operations Meghaloot (1984), Trident (1971).

**PARAM YODHA STHAL**

Landscaped garden to the north of the Canopy and northwest of the Memorial, dotted with individual bronze busts of 22 recipients of the Param Vir Chakra, India's highest military honour, along with short descriptions of their acts of valour. A number of awardees were decorated posthumously; their names are also there in the Tyag Chakra.

## Angkor, Cambodia, a City of Towering Temples in the Forest

### Angkor City in Cambodia

- A study has suggested that the **Angkor, the ancient capital of the Khmer empire**, appears to have **suffered a gradual decline** rather than a catastrophic collapse.
- Previously many archaeologists and historians have said that the **abandonment of Angkor in 15<sup>th</sup>-century, was due to 1431 invasion by the Thai Kingdom from Ayutthaya.**
- The city of Angkor is also home to **UNESCO World Heritage Site, Angkor Vat.**
- **Angkor Archeological Park**
  - Angkor is one of the most important archaeological sites in South-East Asia.

- Stretching over some 400 km<sup>2</sup>, including forested area, **Angkor Archaeological Park contains the magnificent remains of the different capitals of the Khmer Empire, from the 9<sup>th</sup> to the 15<sup>th</sup> century.**
- They include the famous **Temple of Angkor Wat and, at Angkor Thom, the Bayon Temple with its countless sculptural decorations.**

### Angkor Vat Temple

- Angkor Wat is a temple complex in Cambodia and one of the largest religious monuments in the world.
- It was originally constructed as a Hindu temple dedicated to the god Vishnu for the Khmer Empire, it was gradually transformed into a Buddhist temple towards the end of the 12<sup>th</sup> century.
- It was built by the Khmer King Suryavarman II in the early 12<sup>th</sup> century in Yaśodharapura (present-day Angkor), the capital of the Khmer Empire, as his state temple and eventual mausoleum.

## Apatani Tribes in Arunachal Pradesh

- Apatani are a **tribal group** of people living in the **Ziro valley in Arunachal Pradesh.**
- They speak a **local language called Tani and worship the sun and the moon.**
- They **follow a sustainable social forestry system.**
- They celebrate major festivals – **Dree** with prayers for a **bumper harvest and prosperity** of all humankind and **Myoko** to **celebrate Friendship.**
- The Apatanis **practice aquaculture along with rice farming** on their plots. **Rice-fish culture** in the valley is a unique practice in the state, where two crops of **rice** (Mipyra and Emoh) and one crop of **fish** (Ngihi) are **raised together.**



Note:

# Social Issues

## Highlights

- Women Safety Initiatives (38)
- New Initiative SWAYATT (38)
- Operation Digital Board (39)
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- Forest Dwellers Face Eviction (40)
- Global Digital Health Partnership Summit (41)
- Global Leaders Adopt 'Delhi Declaration' on Digital Health (41)
- SHREYAS Scheme (41)
- Indian Sign Language Dictionary (42)

## Women Safety Initiatives

**Ministry of Women and Child Development** has launched three important initiatives on women's safety.

- The Ministry of Women and Child Development has conceptualized these initiatives to promote the safety of women in their living spaces, working spaces, and public spaces.

### Panic Button

- The Ministry of Telecom mandated a physical panic button on all mobile phones in the country in 2015.
- It was noted that such a panic button must be backed by an emergency response mechanism through the local police when the panic button message would alert the specified family members etc. of a woman in distress situation.
- Now a dedicated Emergency Response Centre has been established through which the entire system will be operated.

### SCIM portal under Safe City Project

- An online Safe City Implementation Monitoring (SCIM) portal has been developed by The Ministry of Home Affairs. SCIM will facilitate online tracking of deployment of assets and infrastructure created under the Safe City projects.
- The Government has identified eight cities for implementation of Safe City project. The projects include creation on ground assets & resources and behaviour change programs for safety of women.

### DNA Analysis Facilities in States

- Timely testing of DNA samples from the crime scene is the quickest process of obtaining forensic evidence in cases of sexual assault on women.
- Due to delay in cases of sexual assault investigations, dedicated DNA analysis facilities will be created in the forensic science laboratories on a mission mode.

## New Initiative SWAYATT

Recently the Union Minister of Commerce & Industry has launched an initiative termed SWAYATT.

- SWAYATT is an initiative to promote **Start-ups, Women and Youth Advantage through e-Transactions (SWAYATT)** on **Government e Marketplace (GeM)**.
- This will bring together the key stakeholders within the Indian entrepreneurial ecosystem to Government e-Marketplace the national procurement portal.
- The government also launched **GeM Start-up Runway-an initiative of GeM in association with Start-up India to facilitate Start-ups registered with Start-up India to access the public procurement market** and sell innovative products and services to government buyers.
- GeM Start-up Runway seeks to support **technology development, spur research and innovation** by ensuring a conducive policy environment for industrial diversification and value addition to commodities.
- GeM Start-up Runway will address goals and objectives under **United Nations Sustainable Development Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.**

Note:

### Government e-Marketplace (GeM)

- GeM is an **Online Market platform** was setup in 2016 to facilitate procurement of goods and services by the government ministries, departments, public sector undertakings (PSU) etc.
- It has been envisaged as **National Procurement Portal of India**.
- It has been developed by **Directorate General of Supplies and Disposals (Ministry of Commerce and Industry)** with technical support of **National e-governance Division (Ministry of Electronic and Information Technology)**.
- It functions under **Directorate General of Supplies and Disposals (DGS&D), Ministry of Commerce and Industry**.
- GeM is a completely **paperless, cashless and system driven e-market place** that enables procurement of common use goods and services with minimal human interface.

### Operation Digital Board

The **Ministry of Human Resource Development (MHRD)** has launched **Operation Digital Board (ODB)** to leverage technology in order to boost **quality education in the country**.

- ODB aims to have digital and interactive boards in every classroom, which is on the **lines of Operation Blackboard** which was **started in 1987** to supply the **bare minimum crucial facilities to all primary schools in the country**.

#### Features

- The digital board will be introduced all over the country in **government and government aided schools** from **class 9<sup>th</sup> onwards as well as in higher education institutions**, from the coming session of 2019 itself.
- **University Grants Commission (UGC)** will be the implementing agency for ODB in Higher Education Institutions (HEIs). It will be implemented as a Central scheme, as a loan from **Higher Education Financing Agency (HEFA)**.
- At school level, Digital / SMART board will be provided in all Government and Government – aided schools by the Central Government in collaboration with the State and UTs.

- It aims at **converting a classroom into a digital classroom**.
- Ensure **availability of e-resources** at any time and at any place to students.
- Help in provisioning of **personalised adaptive learning** as well as **Intelligent Tutoring** by exploiting emerging technologies like **Machine Learning, Artificial Intelligence & Data Analytics**.

#### Higher Education Financing Agency

- Higher Education Financing Agency (HEFA) was incorporated in 2017 as a joint venture of MHRD and Canara Bank with an agreed equity participation in the ratio of 91% and 9% respectively.
- Its objective is to finance the creation of capital assets in premier educational institutions in India.
- It is registered under Section 8 [ Not-for-profit] under the Companies Act 2013 as a Union Govt company and as Non-deposit taking NBFC-ND with RBI.
- Recently, HEFA's scope has been expanded to cover school education, educational institutes under Ministry of Health, etc.

#### Benefits

- It will help in **improving the quality of learning** by providing adequate content of high quality which can be taken to every classroom.
- Such technology enabled learning can also **inspire teachers across the country** to raise their own standards of teaching.
- Apart from this, **other initiatives** like e-Pathshala, DIKSHA, National Repository of Open Educational Resources (NROER), National Programme on Technology Enhanced Learning (NPTEL), e-PG Pathshala, SWAYAM and SWAYAM-Prabha DTH Channels etc. have also provided adequate content of high quality which can be taken to every classroom, and thereby facilitating blended learning and flip class learning.

### International Conference on the Vision Zero

- **International Conference** on the 'Vision Zero' and its relevance to **Occupational Safety and Health (OSH)**, is being held from 15<sup>th</sup> to 17<sup>th</sup>, March 2017 in **New Delhi**.

Note:

- It is organized by **Directorate General Factory Advice and Labour Institutes (DGFASLI)**, **Ministry of Labour and Employment** and **German Social Accident Insurance (DGUV)**, **Germany** in association with International Social Security Association - Manufacturing, Construction and Mining.
- 'Vision Zero' is based on the belief that all accidents, diseases and harm at work are preventable by promoting the three core values of safety, health and wellbeing.
- The recommendations of the conference would be vital in achieving sustainable economic progress, in consonance with the changing requirements of safety, health and environment aspects in the country.

## Forest Dwellers Face Eviction

The Supreme Court has ordered the **forced eviction of more than 1,000,000 tribal and other forest-dwelling households** from forestlands **across 16 states** after their claim as forest dwellers have been **rejected under the Forest Rights Act of 2006**.

- A three-judge Bench of **Supreme Court** has **ordered the Chief Secretaries of many of these States to evict those whose claims as forest dwellers have been finally rejected under the law**.

### Background

- **Forest Rights Act**, passed in **2006**, requires the **government to give back rights over traditional forestlands to tribals and other forest-dwellers**.
- **Tribals and other forest-dwellers** are **permitted to lay claims** before authorities through a laid down process in the Act.
- These authorities, **based on criteria set in the law and regulations**, are required to either **approve or reject the claims** with several layers of appeals being available to claimants.
- The court's orders came while **hearing a case filed by wildlife groups** and retired forest officers in 2009 raising a legal challenge on the constitutional validity of the law.
- The petition, besides challenging the constitutional validity of the law, also demanded that those whose claims had been rejected be evicted as 'encroachers'.
- Hearing the case, back in March 2018 the **Supreme Court** had asked **states to report on the status of**

**eviction** of those claimants whose claims have been rejected and the total extent of the areas from which they have been evicted.

### Concerns

- **Several activists** have pointed to the **inaction from the forest department officials in granting forest rights** to these tribal and forest dwellers, issuing land rights documents and other identity cards. For example,
  - According to activists the tribal settlements in the **Eastern Ghats** have not been granted forest rights patta due to the **apathy from forest department officials** and hence face the risk of eviction.
- Tribals and other forest-dwellers have been living in the forest area for centuries. Their livelihood depends on non-timber forest products they harvest, such as food. Hence, the forest department must ensure that they get community rights documents.

### Forest Rights Act, 2006

- The Forest Rights Act (FRA) was introduced to address the "historic injustice" and decades of rights denied to the tribals and forest dwellers due to the colonial forest laws in the country.
- FRA recognises that forest dwelling communities have three kinds of rights:
  - Individual rights (occupation and cultivation);
  - Community rights (grazing, fuel-wood collection, fishing, ownership and disposal of non-timber forest produce ); and
  - Rights to protect, regenerate, conserve and manage community forest resource (CFR) areas.
- The recognition of CFR rights is the most empowering provision of the Act because it restores Gram Sabha's control over governance of forests from the forest department, thereby democratising the country's colonial forest governance as a whole.
- The Act has given executive and judicial power to Grama Sabhas in recognising the rights of the tribals. There are sabhas (committees) in the ward level that is the primary tier to recognise and recommend the rights of tribal hamlets. Then there are Sub-Divisional Level Committees (SDLC), followed by District-Level Committees (DLCs).

Note:

## Global Digital Health Partnership Summit

- **Union Minister of Health and Family Welfare** has inaugurated the '4<sup>th</sup> Global Digital Health Partnership Summit' in **New Delhi**.
- The **global intergovernmental meeting on digital health** is being hosted by the Ministry of Health and Family Welfare in collaboration with **World Health Organization (WHO)** and the **Global Digital Health Partnership (GDHP)**.

### Global Digital Health Partnership (GDHP)

- The GDHP is an international collaboration of governments, government agencies and multinational organisations dedicated to improving the health and well-being of their citizens through the best use of evidence-based digital technologies.
- It was established in February 2018, to provide an opportunity for transformational engagement between its participants.
- Australia was the host country for the inaugural summit in 2018.

## Global Leaders Adopt 'Delhi Declaration' on Digital Health

Recently, as part of the **high-level summit**, the ministers and delegation adopted the Delhi Declaration on **digital health for sustainable development**.

- It was adopted at the concluding session of the '4<sup>th</sup> **Global Digital Health Partnership Summit**'.
- The declaration calls for **World Health Organization's (WHO's) leadership** in digital health and for it to **establish a specific mechanism** to centrally coordinate digital health to assist its Member States.
- An example of application of Digital Health for sustainable development is **telemedicine, remote care and mobile health delivering care in people's homes, instead of in hospitals and clinics**.
- The **global intergovernmental meeting on digital health** was hosted by the **Ministry of Health and Family Welfare** in collaboration with World Health Organization (**WHO**) and the Global Digital Health Partnership (**GDHP**).

### World Health Organisation (WHO)

- The WHO is a specialized agency of the United Nations that is concerned with international public health.
- It is headquartered in Geneva, Switzerland and the WHO's constitution came into force on April 7, 1948—a date now celebrated every year as World Health Day.
- The World Health Assembly is the supreme decision-making body in WHO. The assembly meets annually and is attended by delegations from 194 member states.

## SHREYAS Scheme

Recently, the **Ministry of Human Resource Development** has launched the "**Scheme for Higher Education Youth in Apprenticeship and Skills (SHREYAS)**".

- The objective of scheme is to provide **industry apprenticeship opportunities** to the **general graduates** exiting in April 2019 through the **National Apprenticeship Promotion Scheme (NAPS)**
- It aims to **enhance the employability of Indian youth** by providing '**on the job work exposure**' and earning of stipend.
- The scheme is for students in **degree courses, primarily non-technical**, to introduce employable skills into their learning, promote apprenticeship as integral to education.

### National Apprenticeship Promotion Scheme (NAPS)

- NAPS was launched on 19 August 2016 to promote apprenticeship training and increase the engagement of apprentices.
- It has replaced Apprentice Protsahan Yojna (APY).
- The scheme has the following two components:
  - Reimbursement of 25% of prescribed stipend subject to a maximum of ₹1500/- per month per apprentice by the Government of India to all employers who engage apprentices.
  - Reimbursement of cost of basic training ( upto a limit of ₹7500/- for a maximum of 500 hours/3 months) by the Government of India to Basic Training Providers (BTPs) in respect of apprentices who come directly for apprenticeship training without any formal training.

- **SHREYAS portal** will enable educational institutions and industry to log in and provide their respective demand and supply of apprenticeship. The matching of students with apprenticeship avenues will take place as per pre-specified eligibility criteria.
- These courses will be available to them from **Academic year April-May, 2019**. More than **40 higher educational institutions have already been tied up** for taking up embedded apprenticeship courses.

The scheme would be operationalised by coordination of **Ministry of Skills Development and Entrepreneurship (MSDE) and the Ministry of Labour**.

### Objectives of the Scheme

- To improve employability of students by introducing employment relevance into the learning process of the higher education system.
- To forge a **close functional link between education and industry/service sectors on a sustainable basis**.
- To provide **skills which are in demand**, to the students in a dynamic manner.
- To establish an **'earn while you learn' system** into higher education.
- To help business/industry in securing **good quality manpower**.
- To **link student community with employment facilitating efforts** of the Government.

### Stakeholders

- **Institutions:** The higher education institutions would explain the scheme along with **various options to the students who are in the final year**, and elicit their interest in participation.
- **Sector Skill Councils (SSCs):** SSCs would **identify industries for apprenticeship**, and would also **conduct assessment leading to certification**. Whereas the certification is not a guarantee for placement, it is expected to vastly enhance a candidate's choice of securing employment.
- **Ministry of Skills Development and Entrepreneurship (MSDE):** MSDE would not only **monitor** the programme, progress of the apprentices, but would **finance** the programme by disbursing the claims from the business enterprises towards stipend reimbursement as per the NAPS.

### Sector Skill Councils (SSCs)

- SSCs are set up as autonomous industry-led bodies by National Skill Development Corporation (NSDC), which are responsible for the defining the skilling needs, concept, processes, certification, and accreditation of their respective industry sectors in accordance with National Skill Qualification Framework.
- They create Occupational Standards and Qualification bodies, develop competency framework, conduct Train the Trainer Programs, conduct skill gap studies and Assess and Certify trainees on the curriculum aligned to National Occupational Standards developed by them.
- The ongoing **efforts of the SSCs** would be **monitored by MSDE**, which would also **periodically introduce new SSCs into the SHREYAS fold**. The entire programme would progress with dynamic interface & information sharing between MHRD and MSDE.

## Indian Sign Language Dictionary

- Recently, the government has released **second edition of the Indian Sign Language dictionary**, which aims to give **deaf people the constitutional right to speech and opportunity of freedom of expression (Article 19)** and also **bringing them into the mainstream of the society**.
- The **first edition of the dictionary** was launched with **3,000 words on March 23, 2018**.
- With the **second edition**, the dictionary **now comprises 6,000 Hindi and English words** and their

### Indian Sign Language Research and Training Centre (ISLRTC)

- The ISLRTC is an autonomous organization under the administrative and financial control of Department of Empowerment of Persons with Disabilities (Divyangjan), Ministry of Social Justice & Empowerment, Government of India.
- It was established on 26<sup>th</sup> September, 2015 in accordance with the provisions of Societies Registration Act, 1860.

corresponding **graphic representation** under the categories of academic, legal, medical, technical and everyday terms.

- The dictionary has been developed by the **Indian Sign Language Research and Training Centre (ISLRTC)**, under the **Department of Empowerment of Persons**

**with Disabilities (DEPWD)**, Ministry of Social Justice and Empowerment.

- According to **Census 2011**, there are **50.71 lakh hearing impaired persons** in India and most of them use **Indian Sign Language to communicate**.



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# Security

## Highlights

- Regional Maritime-Safety Conference (44)
- Exercise Sampriti 2019 (44)
- Quick Reaction Surface-to-Air Missile (44)

## Regional Maritime-Safety Conference

- 'Regional Maritime-Safety Conference' (RMSS) was organised for the **first time in India (Mumbai)** by the **National Maritime Foundation (NMF)** in coordination with the **Ministry of Shipping** and the **Ministry of External Affairs** to focus on security and trade.

### NOTE:

- The National Maritime Foundation (NMF), New Delhi, was **established in 2005** as the nation's **first maritime think-tank** for conducting independent and policy-relevant research on 'matters maritime'.
- Safeguarding the shores and promoting **India-Asean trade** along the sea route is the theme for RMSS.
- The volume of maritime traffic within the India-ASEAN sub-region is very dense. The Straits of Malacca-and-Singapore alone account for about 90,000 ship movements every year. So, security strengthening could help in boosting trade and maritime connectivity.
- Today, over 80% of global trade by volume and 70% by value is conducted via the maritime space. In the Indian context, 95% of trade by volume and 77% by value flows on the sea.
- Maritime transport provide cost effectiveness, which is why it is the preferred choice for transportation of bulk commodities such as oil and coal, among others.

## Exercise Sampriti 2019

- The **8<sup>th</sup> edition of India-Bangladesh** joint military exercise, '**Exercise Sampriti 2019**' will be conducted at **Tangail, Bangladesh** from March 2-15.
- The exercise will involve tactical level operations in a **counter insurgency and counter terrorism environment** under the **mandate of the United Nations**.

- The Exercise Sampriti is hosted alternately by both the countries. The **7<sup>th</sup> edition was held in India at Mizoram**.
- The exercise aims to **build, strengthen and promote positive relations** between the **Armies of India and Bangladesh**.

## Quick Reaction Surface-to-Air Missile

- Defence Research and Development Organisation (DRDO) test fired **indigenously** developed **Quick Reach Surface-to-Air missiles(QRSAM)** from **Integrated Test Range (ITR) Chandipur**, in Odisha.
- QRSAM is a state-of-the-art missile with **all weather weapon system**, a strike **range of 30 km** and **capable of engaging multiple targets**.
- The test flights **successfully demonstrated the robust Control, Aerodynamics, Propulsion**, Structural performance and **high manoeuvring capabilities** thus proving the design configuration.

### Defence Research & Development Organisation (DRDO)

- DRDO was formed in 1958 from the amalgamation of the then already functioning Technical Development Establishment (TDEs) of the Indian Army and the Directorate of Technical Development & Production (DTDP) with the Defence Science Organisation (DSO).
- It works under Department of Defence Research and Development of Ministry of Defence.
- It is dedicatedly working towards enhancing self-reliance in Defence Systems and undertakes design & development leading to production of world class weapon systems and equipment in accordance with the expressed needs and the qualitative requirements laid down by the three services.



# Miscellaneous

## Highlights

- Academy Award-2019 (45)
- Khelo India App (45)
- VIVID 2019 (46)

## Academy Award-2019

- Recently, the **91st Academy Awards** ceremony, presented by the **Academy of Motion Picture Arts and Sciences (AMPAS)**, honored the best films of 2018.
- It took place at the Dolby Theatre in **Hollywood, Los Angeles, California**.



## Khelo India App

- Khelo India app helps **create awareness about sports and fitness**, especially among youngsters.
- The emphasis is on **developing the sporting ecosystem in India** and turning the country into a **global sporting superpower** in the years to come.
- Khelo India App is **developed by the Sports Authority of India**.

- **The App** has **three features** which will help to **make it convenient for youngsters to take up sport, identify potential champions among children, across the country**.
- **The first section of App** gives information about the **basic rules and regulations of 18 sports disciplines**.
- Its **second section** includes data of **sporting facilities across the country**.
- The third section has **eight tests** which can be taken to **ascertain a young athlete's level of fitness**.

### Sports Authority of India (SAI)

- The SAI was setup in 1984 as a Society registered under Societies Act, 1860 by the Department of Sports of Ministry of Youth Affairs And Sports.
- The objective of SAI is the promotion of Sports and Games in the country.
- It is also entrusted with the responsibility of maintaining and utilizing, on the behalf of Ministry of Youth Affairs & Sports, the following Stadiums in Delhi which were constructed/renovated for the IX Asian Games held in New Delhi in 1982:
  - Jawaharlal Nehru Sports Complex
  - Indira Gandhi Sports Complex
  - Major Dhyana Chand National Stadium
  - Dr. Shyam Prasad Mookherjee Swimming Pool Complex
  - Dr. Karni Singh Shooting Ranges
- The erstwhile Society for National Institutes of Physical Education & Sports (SNIPES) consisting of NSNIS Patiala at its centers and the two LNCPEs (Lakshmi Bai National College of Physical Education) located at Gwalior and Thiruvananthapuram were merged with SAI in 1987.
  - The LNCPE Gwalior was however, delinked from SAI in 1995 on attaining the status of a "Deemed University".

## VIVID 2019

- VIVID-**Vision Insight and Voices as India goes Digital**- the District Informatics Officer (DIO) meet, was organised by **National Informatics Centre (NIC)**.
- The meet is held as an initiative to interact with the DIO's and to share their experiences as well as contribution, as the digital changemakers at the grassroot level in the States.

### National Informatics Centre (NIC)

NIC provides nationwide ICT infrastructure to support e-Governance services and various initiatives of Digital India. It is part of the Ministry of Electronics and Information Technology's Department of Electronics & Information Technology.

- **VIVID started in 2017, as an annual event**, with the objective to empower NIC officials in the field of technology.





