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Current Affairs

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RAO'S ACADEMY

90th Anniversary of Sivagiri Pilgrimage

Prime Minister will participate in the inaugural ceremony of yearlong joint celebrations of 90th anniversary of Sivagiri Pilgrimage.

Key Points

- Sivagiri Pilgrimage is held every year for three days from December 30 to January 1 at Sivagiri, Thiruvananthapuram.
- According to the Shri Narayana Guru, the aim of pilgrimage should be the creation of comprehensive knowledge among the people and the pilgrimage should help in their overall development and prosperity.
- The pilgrimage, therefore, focuses on eight subjects:
 - education, cleanliness, piety, handicrafts, trade and commerce, agriculture, science & technology and organised endeavour.
- The pilgrimage started with a handful of devotees in 1933 but now has become one of the major events in South India.
- Every year, lakhs of devotees from all over the world irrespective of caste, creed, religion and language visit Sivagiri to participate in the pilgrimage.
- Shri Narayan Guru had also envisioned a place to teach the principles of all religions with equanimity and equal respect.
 - The Brahma Vidhyalaya of Sivagiri was set up to realise this vision.
 - Brahma Vidhyalaya offers a course of 7-years on Indian Philosophy including the works of Shri Narayan Guru and scriptures of all important religions of the world.

About Shri Narayan Guru

- Sree Narayana Guru was born on 22nd August, 1856 to Madan Asan and his wife Kuttiamma in Chempazhanthy, a village near Thiruvananthapuram, Kerala.
- The Guru was born into an Ezhava family, in an era when people from backward communities like the Ezhavas faced social injustice in the caste-ridden Kerala society.
- Gurudevan, as he was known among his fol-

lowers, led a Reform movement in Kerala.

- He revolted against caste system and worked on propagating new values of freedom in spirituality and social equality which transformed the Kerala society.
- He learned Vedas, Upanishads, literature, logical rhetoric of Sanskrit, Hatha Yoga and other philosophies.
- He gave the famous slogan “One Caste, One Religion, One God for All” (Oru Jathi, Oru Matham, Oru Daivam, Manushyanu).
- In 1888, he built a temple dedicated to Lord Shiva at Aruvippuram which was against the caste-based restrictions of the time.
- Later, in 1903, he established the Sree Narayana Dharma Paripalana Yogam (SNDP), a charitable society as the founder and president.
- In 1924, the Sivagiri pilgrimage was established to promote the virtues of cleanliness, education, devotion, agriculture, handicrafts, and trade.

Basava Jayanthi

Basava Jayanti is the birthday of the acclaimed founder of the Lingayat form of Hinduism, named “Basavanna.”

About Jagadguru Basaveshwara

Basava Jayanthi is celebrated in honor of Mahatma Basaveshwar who was a famous Philosopher, Statesman, Social Reformer, and Saint in the Shaivism Bhakti Movement during the 12th Century.

- The famous Saint was born in 1105 CE to a family of Shiva devotees in the Northern parts of Karnataka.
- He introduced the practice of wearing Ishtalinga necklace which symbolizes Lord Shiva and is worn by all Lingayats.
- He was an ardent follower of Shaivism and spread his philosophy during the Bhakti movement in Southern India.
- Lord Basava put forward the idea that temple worship and rituals propagated could be replaced by a different form of devotion.
- It focused mainly on personal and direct worship of Lord Shiva through symbols like the Shiva Lin-

ga.

- Basavanna spread social awareness through his poetry known as Vachanaas.



Gurudev Rabindranath Tagore Jayanti

Gurudev Rabindranath Tagore's birth anniversary was celebrated across the country.

- He was a poet, philosopher, musician, writer, and educationist.

About Rabindranath Tagore



- Rabindranath Tagore (1861-1941) was the youngest son of Debendranath Tagore, a leader of the Brahmo Samaj.
- At a very young age, Rabindranath Tagore was part of the Bengal renaissance, which his family took active participation in.
- He drew inspiration by reading the classical poetry of Kalidasa and started coming up with classical poems of his own.
- In 1901, Rabindranath Tagore became the editor of the magazine Bangadarshan.
- He was popularly called as Gurudev and his songs were popularly known as Rabindrasangeet.
- In 1905, Lord Curzon decided to divide Bengal into two parts. Rabindranath Tagore strongly protested against this decision.
 - He introduced the Rakhibandhan ceremony, symbolizing the underlying unity of undivided Bengal.
- Rabindranath Tagore became the first Asian to become Nobel laureate when he won Nobel Prize for his collection of poems, Gitanjali, in 1913.
- In 1915 he was knighted by the British King

George V.

- In 1919, following the Jallianwala Bagh massacre, Tagore renounced his knighthood.
- In 1921, Rabindranath Tagore established Viswabharati University.
- In 1940 Oxford University arranged a special ceremony in Santiniketan and awarded Rabindranath Tagore with Doctorate of Literature.
- Gurudev Rabindranath Tagore passed away on



- Gokhale hailed from the Ratnagiri district in present-day Maharashtra and studied at the Elphinstone College in Mumbai.
- He joined Fergusson College in Pune as professor where he taught political economy and history.
- Gokhale first arrived on the national scene after cross-examining British colonial expenditure at the Welby Commission of 1897 in England.
- Gokhale's work earned him praise in India as he laid bare British military financing policies that heavily burdened Indian taxpayers.
- In 1889, Gokhale joined the Indian National Congress, emerging as one of the main leaders of its 'moderate' wing.
- Gokhale is best remembered for his extensive work in colonial legislatures.
- Between 1899 and 1902, he was a member of the Bombay Legislative Council followed by a stint at the Imperial Legislative Council from 1902 till his death.
- He started working with Ranade in the Poona Sarvajanik Sabha of which he later became the Secretary.
- Ranade helped Gokhale in establishing the "Servants of India Society" in 1905.
 - The main objective of this society was to train Indians to raise their voice against social evils and and serve their country.
- At Bombay, Gokhale opposed the British government's onerous land revenue policies, advocated free and compulsory primary education.
- He also asked for the creation of equal opportunities to fight against untouchability.
- At the Imperial legislature, Gokhale played a key role in framing the Morley-Minto reforms of 1909 and advocated for the expansion of legislative councils.
- A critic of British imperial bureaucracy, Gokhale favoured decentralisation and the promotion of

panchayat and taluka bodies.

- Gokhale became Congress president at its Banaras session in 1905.
- Gokhale first met Gandhiji in 1896 and later explained to him the issues plighting the common people in India and urged Gandhiji to return to his country to join the efforts of the Congress.
- He helped Gandhi structure the Natal Indentured Labour Bill in 1910 and raised money for Gandhiji's efforts in South Africa.
- Gandhiji regarded Gokhale as his political mentor, and wrote a book in Gujarati dedicated to the leader titled 'Dharmatma Gokhale'.

Maharana Pratap

Maharana Pratap Jayanti was celebrated on 9th May.

About Maharana Pratap



- Maharana Pratap was born on May 9, 1540, in Kumbhalgarh Fort to Jaiwanta Bai and Udai Singh II.
- Maharana Udai Singh II ruled the kingdom of Mewar, with his capital at Chittorgarh.
- Maharana Pratap was granted the title of Crown Prince since he was the eldest of twenty-five sons.
- In the line of the Sisodiya Rajputs, he was destined to be the 54th ruler of Mewar.
- Chittor was surrounded by Emperor Akbar's Mughal forces in 1567 when Crown Prince Pratap Singh was just 27 years old.
- Maharana Udai Singh II chose to abandon Chittor and relocate his family to Gogunda.
- The young Pratap Singh decided to stay and battle the Mughals, but his elders intervened and persuaded him to leave Chittor.

- In 1572, after the demise of Udai Singh, Rani Dheer Bai insisted her eldest son, Jagmal, should be crowned as the king.
- But the senior courtiers felt that Pratap was a better choice to handle the prevailing situation. This is how Pratap succeeded his father to the throne.
- In the course of the year 1573, Akbar sent six diplomatic missions to Mewar to get Rana Pratap to agree to the former's suzerainty but Rana Pratap turned down each one of them.
- The last of these missions was headed by Raja Man Singh.
 - Akbar understood that Maharana Pratap would never submit and he would have to use his troops against Mewar.
- In 1576, the famous battle of Haldighati was fought with 20,000 Rajputs against a Mughal army of 80,000 men commanded by Raja Man Singh.
- The Mughals were triumphant and killed a large number of Mewaris, but they were unable to capture the Maharana.
- The fighting took place in a narrow mountain pass near Gogunda, which is now known as Rajsamand in Rajasthan.
- Maharana Pratap Singh died on January 19, 1597, at the age of 56, in Chavand from injuries suffered in a hunting accident.
- His eldest son, Amar Singh I, succeeded him.

Santoor Maestro Pandit Shivkumar Sharma Passes Away

Pt Shiv Kumar Sharma, who placed santoor on the centre stage of classical music, passes away.

About Pt Shiv Kumar Sharma

- A Padma Vibhushan recipient, Sharma was born in Jammu in 1938.
- He is believed to be the first musician to have played Indian classical music on the santoor, a folk instrument from Jammu and Kashmir.
- As one half of musician duo Shiv-Hari, he composed music with flute legend Pt. Hari Prasad Chaurasia for an array of films such as "Silsila", "Lamhe" and "Chandni".
- He was awarded:
 - the [Sangeet Natak Akademi Award](#) in 1986,
 - the [Padma Shri](#), India's fourth highest civilian award in 1991, and
 - the [Padma Bhushan](#), India's third highest civilian award in 2001.

Kwar Hydro Electric project

The Cabinet Committee on Economic Affairs chaired by the Prime Minister, has approved the investment of Rs.4526.12 crore for 540 Megawatt (MW) Kwar Hydro Electric Project.

- The project will be located on river Chenab, in Kishtwar district of Union Territory of Jammu and Kashmir.

Key Points

- The project will be implemented by M/s. Chenab Valley Power Projects Private Limited (M/s. CVPPL).
 - a joint venture company between NHPC and JKSPDC (Jammu and Kashmir State Power Development Corporation) with equity contribution of 51% and 49% respectively.
- The Kwar Hydro Electric Project shall be commissioned with a span of 54 months.
- The project shall generate 1975.54 million units in a 90% dependable year.
- The construction activities of the Project will result in direct and indirect employment to around 2500 persons.
- Other hydroelectric projects in the area include 1,000 MWs Pakal Dul hydroelectric project and 624 MWs run-of-the-river Kiru hydroelectric project.



- This confluence occurs in Tandi, which is located within the upper Himalayas in Lahaul and Spiti district in Himachal Pradesh.
- The length of the Chenab River is estimated to be approximately 960 kilometers.
- The Chenab flows within Himachal for approximately 122 kilometers.
- The Jhelum River joins the Chenab River at Trimmu, following which the Chenab is also joined by Ravi River Ahmedpur Sial.
- After this the Chenab merges with Sutlej River at an area near Uch Sharif in Pakistan.
- Baglihar Dam also called Baglihar Hydroelectric Power Project was constructed in two phases on Chenab River in the southern Doda district.
- The tributaries of the Chenab River include Miyar Nalla, Sohal, Thiro, Bhut Nalla, Marusudar and Lidrari.
 - Marusudar is regarded as the biggest tributary of Chenab and joins Chenab in Bhandalkot.

CABINET DECISIONS 27-04-2022

KWAR HYDRO ELECTRIC PROJECT

Rs.4526.12 crore approved for 540 Megawatt Kwar Hydro Electric Project

Project to come up on river **Chenab** in Kishtwar district of Jammu and Kashmir

To be implemented by M/s. **Chenab Valley Power Projects Private Limited**

1/2

Cabinet approves continuation of PM SVANidhi

The Cabinet Committee on Economic Affairs chaired by the Prime Minister has approved the continuation of lending under the Prime Minister Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi).

- PM SVANidhi has been extended beyond March 2022 till December 2024.

Key Points

The focus will be on enhanced collateral free affordable loan corpus, increased adoption of digital transactions and holistic socio-economic development of the Street Vendors and their families.

About Chenab River

The river Chenab (or Chandra Bhaga) is formed after the two streams the Chandra and the Bhaga merge with each other.

- o The approval is expected to benefit nearly 1.2 crore citizens of Urban India.
- The budget for promotion of digital payments including cashback to the vendors has also been enhanced.



About PM SVANidhi

Ministry of Housing & Urban Affairs launched a scheme PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi) to empower Street Vendors.

- PM SVANidhi Scheme was launched in June 2020 as a Micro-Credit facility which aims to empower street vendors to recover losses incurred as a result of the COVID-19 pandemic.
- The scheme not only extends loans to them, but also aims for their holistic development and economic upliftment.
- The scheme intends to facilitate collateral free working capital loans of up to INR10, 000/- of one-year tenure.
- It targets approximately 50 lakh street vendors, to help resume their businesses in the urban areas, including surrounding peri-urban/rural areas.
- The PM SVANidhi scheme offers incentives in the form of:
 - o interest subsidy @ 7% per annum on regular repayment of loan
 - o cashback upto INR1200/- per annum on undertaking prescribed digital transactions
 - o eligibility for enhanced next tranche of loans

Note: Close to 2 million applications have been received under this scheme, of which 752191 have been sanctioned, and 218751 loans have already been disbursed.

- Under PM SVANidhi, significant achievements have already been made.
- As on April 25, 2022, 31.9 lakh loans have been sanctioned and 29.6 lakh loans amounting to Rs. 2,931 crore have been disbursed.
- The beneficiary Street Vendors have conducted more than 13.5 crore digital transactions and have been given a cashback of Rs.10 crore.
- An amount of Rs.51 crore has been paid as Interest Subsidy.

DELIMITATION COMMISSION FINALISES THE DELIMITATION ORDER

The Delimitation Commission headed by Justice Ranjana Prakash Desai has finalised the Delimitation Order for the Union Territory of Jammu & Kashmir.

Key Points

As per the final Delimitation Order, the following will come into effect from the date to be notified by the Central Government:-

- Out of the 90 Assembly Constituencies in the region, 43 will be part of Jammu region and 47 for Kashmir region.
 - o This will be in accordance with the provisions of Section 9(1) (a) of the Delimitation Act, 2002 and Section 60(2)(b) of Jammu & Kashmir Reorganization Act, 2019.
- 9 Assembly Constituencies (ACs) have been reserved for STs, out of which, 6 are in Jammu region and 3 ACs in the Valley.
 - o Seven seats are also reserved for Schedules Caste.
- The Delimitation Commission was entrusted with the work of delimiting the Assembly and Parliamentary Constituencies in the UT of Jammu and Kashmir on the basis of 2011 Census.

About Delimitation Commission of India

- Delimitation literally means the act or process of fixing limits or boundaries of territorial constituencies in a country or a province having a legislative body.
- The job of delimitation is assigned to a high power body. Such a body is known as Delimitation Commission or a Boundary Commission.
- In India, such Delimitation Commissions have been constituted 4 times – in 1952, 1962, 1973 and 2002.
- The Delimitation Commission in India is a high power body whose orders have the force of law and cannot be called in question before any court.
- These orders come into force on a date to be specified by the President of India in this behalf.
- The copies of its orders are laid before the House of the People and the State Legislative Assembly concerned, but no modifications are permissible therein by them.

Common Guidelines on Pharmaceutical Innovation and Entrepreneurship

Department of Pharmaceuticals recently released “Common Guidelines on Pharmaceutical Innovation and Entrepreneurship” for academic institutions.

- It is prepared by National Institutes of Pharmaceutical Education and Research (NIPERs).

Key Points

- The policy aims:
 - to transform the academic research into innovative and commercially applicable technologies/products;
 - build strong ecosystem for nurturing creativity and entrepreneurial activities and
 - contribute to self-reliant India mission (Atmanirbhar Bharat).
- The Policy Guidelines aims to:
 - Encourages the faculty/staff members and students to pursue entrepreneurship;
 - Formulate policies & foster an ecosystem to generate ideas;
 - Establish a mechanism for technology development and technology transfer;
 - Create institutional framework for effective implementation, monitoring, and evaluation of the policy; and
 - Promote pharmaceutical innovation and entrepreneurship to foster the unmet therapeutic, socially impactful technologies delivering benefits to mankind.
- These Policy Guidelines, finalized with approval of the Minister for Chemicals and Fertilizers have been forwarded to all NIPERs for taking up further steps for their speedy and effective implementation.
- Involvement of Department of Pharmaceuticals
- The Vision of the Department of Pharmaceuticals is:
 - to promote Indian pharma sector as the global leader for quality medicines and
 - to ensure availability, accessibility and affordability of drugs and medical devices in the country.
- One of the measures to achieve the vision is to concentrate on Research & Development and innovation.
- In order to achieve the same, the Depart-

ment, has set up seven National Institutes of Pharmaceutical Education and Research (NIPERs).

- NIPERs have recently launched a common Research portal for industry and researchers and have also prepared a Common Research Programme.
- Working towards the same goal, NIPER prepared ‘Common Guidelines on Pharmaceutical Innovation and Entrepreneurship’ for academic institutions under its control.

NITI Aayog Releases Draft Battery-Swapping Policy

To expedite large-scale adoption of EVs, the government think tank NITI Aayog released the draft battery-swapping policy.

- The policy is targeted at electric two-wheelers and three-wheelers, proposing incentives for electric vehicles with swappable batteries.



Key Points

- The draft policy recommends prioritising all metropolitan cities with a population greater than four million for development of battery-swapping networks under the first phase (1-2) years.
- This will be followed by all major cities such as state capitals, UT headquarters and cities with population greater than 5 lakh in the next 2-3 years.
- The document released by the think tank states that this policy will be valid from the date of its public notification till March 31, 2025.
- The draft policy proposes that demand-side incentives offered under existing or new schemes for EV purchase can be made available to EVs with swappable batteries eligible under this policy.
- Further it has proposed that batteries will be tested and certified as per AIS 156 (2020) and AIS 038 Rev 2 (2020) standards for safety of traction battery packs.
- For EVs with swappable battery functionality, vehicle OEMs shall be required to get approval for their vehicles to accept interoperable swappable batteries.
- The tax rates on Lithium-ion batteries and Elec-

trick Vehicle Supply Equipment (EVSE) are 18% and 5% respectively.

- The draft policy suggested that the GST Council may consider reducing the differential across the two tax rates.

What is Battery Swapping?

- Battery swapping is an alternative that involves exchanging discharged batteries for charged ones.
- Battery swapping de-links the vehicle and fuel (in this case, the battery) and thereby leads to a reduction in the upfront cost of the vehicles.
- Battery swapping is popularly used for smaller vehicles, such as two- and three-wheelers, which have smaller batteries that are easier to swap.
- Battery swapping offers three key advantages relative to charging—time-saving, space-efficient, and cost-effective—provided each swappable battery is actively used.
- Further, Battery swapping provides a level playing field to innovative and sustainable business models, such as ‘Battery as a Service’.

Draft Protection and Enforcement of Interests in Aircraft Objects Bill, 2022:

The Ministry of Civil Aviation has sought stakeholders' comments on the draft Protection and Enforcement of Interests in Aircraft Objects Bill, 2022.

- The Bill implements the provisions of the Convention on International Interests in Mobile Equipment and Protocol on Matters Specific to Aircraft Equipment.

Key Points

- Once passed, the law will help international aircraft leasing companies to repossess and transfer planes out of India in case of a financial dispute with an Indian airline.
- The Convention on International Interests in Mobile Equipment and Protocol on Matters Specific to Aircraft Equipment, both were adopted at a conference in Cape Town in 2001.
- India acceded to the two instruments in 2008.
- These provide default remedies for the creditor and create a legal regime for disputes.
- The proposed law provides remedies such as repossession of an aircraft object, or its sale or lease or collection of income from its use as well as de-registration and export of planes.

Why such a policy?

As per the ministry, the draft legislation is necessary because several Indian laws such as the Companies Act, 2013 and the Insolvency and Bankruptcy Code, 2016 are in conflict with the Cape Town Convention and Protocol.

- It says that Indian entities have also suffered as international financial institutions demand an implementing legislation.

PIL against the lifetime status of ‘Cabinet minister’

The BJP govt had honoured the veteran Congress leader – Pratapsingh Rane – for his 50 years as MLA by providing the “lifetime status of the rank of Cabinet minister”.

The Bureau of Energy Efficiency (BEE), the Central Nodal Agency responsible for the rollout of EV public charging infrastructure, will be responsible for the implementation of battery-swapping networks across the country.

- Pratapsingh Rane is a six-time Chief Minister of Goa and a legislator for a full 50 years.

Key Points

- A case in the HC now says this move violated the 91st Amendment.
- Goa has a 12-member Cabinet, and the conferment of Cabinet status on Rane results in the number of Cabinet ranks rising to 13.
- This exceeds the ceiling mandated by the Constitution. There are 40 seats in the unicameral Goa Assembly.
- The Constitution (91st Amendment) Act, 2003 inserted clause 1A in Article 164.
 - The 91st Amendment states that the total number of Ministers shall not exceed fifteen per cent of the total number of members of the Legislative Assembly of that state.
- PIL says that with the inclusion of Pratap Singh Rane, the number of cabinet ministers become equal to 13.
 - This exceeds the 15% limit.

Governor’s powers to appoint VCs of state universities

Tamil Nadu has passed two Bills proposing to take away the Governor’s powers to appoint VCs of state universities.

- The Bills also seek to empower the state government to have the final word on the removal of VCs, if needed.

Key Points

- The Bills stress that “every appointment of the Vice-Chancellor shall be made by the Government from out of a panel of three names” recommended by a search-cum-selection committee.
- Removal will be carried out based on inquiries by a retired High Court judge or a bureaucrat who has served at least as a Chief Secretary.
- TN Chief Minister has stated that the Bills were required as the Governor was disregarding the state government’s opinion on the appointments of VCs.

Role of UGC and Other Provisions

- Education comes under the Concurrent List, but entry 66 of the Union List gives the Centre sub-

stantial authority over higher education.

- Here, the University Grants Commission (UGC) plays standard-setting role, even in the case of appointments in universities and colleges.
- According to the UGC Regulations, 2018, “Visitor/Chancellor” — mostly the Governor in states — shall appoint the VC out of the panel of names recommended by search-cum-selection committees.
- Higher educational institutions, particularly those that get UGC funds, are mandated to follow its regulations.

Supreme Court Observation

- Any appointment as a Vice Chancellor contrary to the provisions of the UGC Regulations can be said to be in violation of the statutory provisions, warranting a writ of quo warranto”.
- Every subordinate legislation of the UGC flows from the parent UGC Act, 1956.
- Therefore, being a subordinate legislation, UGC Regulations become part of the Act.
- In case of any conflict between state legislation and central legislation, central legislation shall prevail.
 - This by applying the rule/principle of repugnancy as enunciated in Article 254 of the Constitution.

Amendment to Flag Code

The Union Government recently amended the National Flag Code, allowing polyester and imported cloth to be used for National flag.

- Khadi activists contend that the move will only dilute the definition of khadi but also undermine the spirit of freedom struggle.

Key Points

- As per rule 1.2 of part 1 of the Flag code of India 2002, only khadi or hand-spun cloth was the material for the flag.
- Use of other material was punishable.
- But the recent amendment has changed it to “The National Flag shall be made of hand spun and hand woven or machine made, cotton, polyester, wool, silk khadi bunting.”
- That means machine made polyester that is made in India or imported from elsewhere can now be used for the tricolour.

Note: So far, the hand spun, hand woven khadi flag was made in the country’s sole BIS-approved flag manufacturing unit in Hubballi, Karnataka.

About the National Flag

- Present flag is based on the Swaraj flag, a flag of the Indian National Congress designed by Pingali Venkayya.
- After undergoing several changes, the Tricolour was adopted as our national flag at a Congress Committee meeting in Karachi in 1931.
- The National Flag shall be rectangular in shape.

The ratio of the length to the height (width) of the Flag shall be 3:2.

- The Flag shall not be flown at half-mast except on occasions on which the Flag is flown at half-mast on public buildings in accordance with the instructions issued by the Government.
- The Flag shall not be used as a drapery in any form whatsoever, including private funerals except in State funerals or armed forces or other paramilitary forces funerals”.
- The Flag shall not be used as a portion of costume or uniform of any description.

Regulations for ‘Ayurveda Aahara’ products

Ministry of Ayush and Food Safety & Standards Authority of India (FSSAI) has formulated regulations of safety & quality standards for food products under ‘Ayurveda Aahara’ category.

- This comprehensive initiative will ensure manufacturing of quality Ayurveda food products and help in expanding the international market for Make-In-India products.



Key Points

- The Ministry of Ayush is confident these regulations will further strengthen India’s global positioning as a custodian of Ayush system.
- According to the regulation, manufacturing and marketing of ‘Ayurveda Aahara’ products will now adhere to strict Food Safety and Standards (Ayurveda Aahara) Regulations, 2022 rules.
- These products will now be available in market only after license/approval from FSSAI.
- A special logo has been created for “Ayurveda Aahara” category, which will enable easier identification and reinforce quality in Ayurveda food products.
- According to the regulations, all food prepared in accordance with the recipes/ingredients/processes described in the authoritative books of Ayurveda will be considered as “Ayurveda Aahara”.
- Food recipes and ingredients for promoting health, specific physiological needs, and foods specified for consumption during or post specified diseases,

disorders referred as Pathya in Ayurved are covered under these regulations.

- However, 'Ayurveda Aahara' will not include Ayurvedic drugs or proprietary Ayurvedic medicines.
- Further, Ayurveda Aahara is also not recommended to young children below age 2 years.

25th CEC of India

Shri Rajiv Kumar today assumed charge as the 25th Chief Election Commissioner of India.

- Shri Rajiv Kumar has been serving in ECI as Election Commissioner since September 1, 2020.
- During his tenure as Election Commissioner, elections have been held for State Assemblies of Bihar in 2020, Assam, Kerala, Puducherry, Tamil Nadu and West Bengal.



About Election Commissioner of India

The Election Commission is a permanent and an independent body established by the

- Constitution of India directly to ensure free and fair elections in the country.
- Article 324 of the Constitution provides that the power of superintendence, direction and control of elections to parliament, state legislatures, the office of president of India and the office of vice-president of India shall be vested in the election commission.
- Thus, the Election Commission is an all-India body in the sense that it is common to both the Central government and the state governments.
- It must be noted here that the election commission is not concerned with the elections to panchayats and municipalities in the states.
- For this, the Constitution of India provides for a separate State Election Commission.

Composition

Article 324 of the Constitution has made the following provisions:

- The Election Commission shall consist of the chief election commissioner and such number of other election commissioners, if any, as the president may from time to time fix.
- The appointment of the chief election commissioner and other election commissioners shall be made by the president.
- The chief election commissioner shall act as the chairman of the election commission.
- Since 1993, the Election Commission has been functioning as a multi-member body consisting of three election commissioners.
- The chief election commissioner and the two other election commissioners have equal powers.
- In case of difference of opinion amongst the Chief Election Commissioner and/or two other election commissioners, the matter is decided by the Commission by majority.

Note: They hold office for a term of six years or until they attain the age of 65 years, whichever is earlier.

Independence

- The chief election commissioner is provided with the security of tenure.
- He cannot be removed from his office except in same manner and on the same grounds as a judge of the Supreme Court.
- Any other election commissioner or a regional commissioner cannot be removed from office except on the recommendation of the chief election commissioner.

Note: The Constitution has not prescribed the qualifications (legal, educational, administrative or judicial) of the members of the Election Commission

Powers and functions

- To determine the territorial areas of the electoral constituencies throughout the country on the basis of the Delimitation Commission Act of Parliament.
- To prepare and periodically revise electoral rolls.
- To notify the dates and schedules of elections.
- To grant recognition to political parties and allot election symbols to them.
- To act as a court for settling disputes related to granting of recognition to political parties.
- To determine the code of conduct.
- To advise the president on matters relating to the disqualifications of the members of Parliament.
- To advise the governor on matters relating to the disqualifications of the members of state legislature.
- To cancel polls in the event of rigging.
- To advise the president whether elections can be held in a state under president's rule in order to extend the period of emergency after one year.

EARTH DAY 2022

April 22 is celebrated worldwide as World Earth Day.

- The official theme for Earth Day 2022 is 'Invest In Our Planet'.

What is Earth Day?

- First held on April 22, 1970, it now includes a wide range of events coordinated globally by EarthDay.org (formerly Earth Day Network).
- Earth Day is an annual event on April 22 to demonstrate support for environmental protection.



About EarthDay.Org

- EARTHDAY.ORG's mission is to diversify, educate and activate the environmental movement worldwide.
- Growing out of the first Earth Day in 1970, EARTHDAY.ORG is the world's largest recruiter to the environmental movement, working with more than 150,000 partners in over 192 countries to drive positive action for our planet.

International Conference on Disaster Resilient Infrastructure

The Prime Minister addressed the inaugural session of the fourth edition of the International Conference on Disaster Resilient Infrastructure in New Delhi.

- Theme 2022: Envisioning a People-Centered and Resilient Infrastructure Transition.

PM Modi's Address at International Conference on Disaster Resilient Infrastructure (ICDRI)



About the Conference

- The International Conference on Disaster Resilient Infrastructure (ICDRI) is the annual conference of the Coalition for Disaster Resilient Infrastructure (CDRI).
- It brings together member countries, organizations and institutions to strengthen the global discourse on disaster and climate resilient infrastructure.
- In 2018 and 2019, the first and second International Workshop on Disaster Resilient Infrastructure took place in New Delhi, India.
- ICDRI 2021 was hosted virtually.
- The fourth edition of ICDRI is being organized in partnership with the United States Government, from 4 to 6 May 2022 in hybrid format.
- ICDRI 2022 will include multi-sectoral and multi-country discussions around:
 - infrastructure transitions,
 - risk governance and finance,
 - innovation, and
 - human-centric, ecologically sensitive design for building resilience.

About CDRI

The Coalition for Disaster Resilient Infrastructure (CDRI) is a partnership of:

- national governments,
- UN agencies and programmes,
- multilateral development banks and financing mechanisms,
- the private sector, and knowledge institutions
- that aims to promote the resilience of new and

existing infrastructure systems to climate and disaster risks in support of sustainable development.

Note: The Prime Minister of India launched CDRI during his speech at the UN Climate Action Summit in September 2019.

- CDRI promotes rapid development of resilient infrastructure to respond to the Sustainable Development Goals.
- Members: 30 countries and 8 organizations.
- The CDRI Secretariat is based in New Delhi, India.
- The following are the main thematic areas that guide CDRI's work:
 - Governance & Policy
 - Risk Identification & Estimation
 - Standards and Certification
 - Capacity-building
 - Innovation & Emerging Technology
 - Recovery & Reconstruction
 - Finance
 - Community-based Approaches



COP15: Combating Desertification; Caring for Land

India is participating in the Conference of Parties (COP) 15th meeting of the United Nations Convention on Combating Desertification (UNCCD COP15).

- The Indian delegation led by Union Minister for Environment, Forest and Climate Change, is representing India at Abidjan, Cote D'Ivoire.

Background: COP 14

- India had hosted the fourteenth session of Conference of Parties of United Nations Convention to Combat Desertification at New Delhi.
- At COP 14, India announced to raise the total area that would be restored from its land degradation status, from twenty-one million

hectares to twenty-six million hectares between now and 2030.

- The emphasis will be given to the degraded agricultural, forest and other wastelands by adopting a landscape restoration approach.
- In another significant development during India's presidency, G-20 leaders recognized the importance of combating land degradation.
 - An aspirational goal to collectively plant 1 trillion trees by 2030 was put up by the G20 countries.

About COP 15

- The fifteenth session of the Conference of the Parties (COP15) of the UNCCD is being held at Abidjan, Côte d'Ivoire.
- The theme of COP15 is, 'Land. Life. Legacy: From scarcity to prosperity'.
- COP15 will bring together leaders from governments, the private sector, civil society, and other key stakeholders from around the world.
- COP15 is aimed at driving progress in the future sustainable management of one of our most precious commodities: land.
- India is the current president of the UNCCD.



Intersolar Europe 2022

Union Minister of State for Ministry of New and Renewable Energy will attend Intersolar Europe 2022 to be held in Munich, Germany.

- The Minister would deliver key note address at the investment promotion event "India's Solar Energy Market".
- The event is being organized by the Indo-German Energy Forum (IGEF).

About Intersolar Europe 2022

- Intersolar Europe is the world's leading exhibition for the solar industry.
- It unites people and companies from around the world with the aim of increasing the share of solar power in our energy supply.
- Intersolar exhibitions and conferences are held in Munich, São Paulo, Long Beach, Gandhinagar, Dubai and Mexico City.

- These global events are complemented by the Intersolar Summits, which take place in emerging and growing markets worldwide.
- The event's exhibition and conference both focus on the areas of:
 - photovoltaics, solar thermal technologies, solar plants, as well as grid infrastructure and solutions for the integration of renewable energy.

About Indo-German Energy Forum (IGEF)

- The Indo-German Energy Forum was established in 2006 by the Indian Prime Minister and the German Chancellor.
- Aim was to enhance and deepen the strategic dialogue about the ongoing energy transition.
- IGEF facilitates a constructive dialogue between decision makers in government and industry on:
 - sustainable energy supply and energy use
 - the development of markets for power plant technologies, energy efficiency and renewable energies
 - support strategic private-sector activities such as pilot and demonstration projects
 - collaborative projects involving Indian and German private businesses.

India's Solar Energy



- The country is targeting about 450 Gigawatt (GW) of installed renewable energy capacity by 2030 – about 280 GW (over 60%) is expected from solar.
- Solar power installed capacity has increased by more than 18 times from 2.63 GW in March 2014 to 49.3 GW in at the end of 2021.
- In FY22, till December 2021, India has added 7.4GW of solar power capacity, up 335%

from 1.73 GW in the previous year.

- Off-grid solar power is growing at a fast pace in India, with sales of 329,000 off-grid solar products in the first half of 2021.
- In the Union Budget 2022-23, the government allocated Rs. 19,500 crore (US\$ 2.57 billion) for a PLI scheme to boost manufacturing of high-efficiency solar modules.
- Globally, India ranks fourth in renewable energy capacity and wind power and fifth in solar power capacity.
- India added a record 10 Gigawatt (GW) of solar energy to its cumulative installed capacity in 2021.
- This has been the highest 12-month capacity addition, recording nearly a 200% year-on-year growth.
- India has now surpassed 50 GW of cumulative installed solar capacity, as on 28 February 2022.
- Of the 50 GW installed solar capacity, an overwhelming 42 GW comes from ground-mounted solar photovoltaic (PV) systems, and only 6.48 GW comes from roof top solar (RTS).



Note: In 2021-22, India imported nearly \$76.62 billion worth solar cells and modules from China alone.

India's largest PEM based Green Hydrogen project

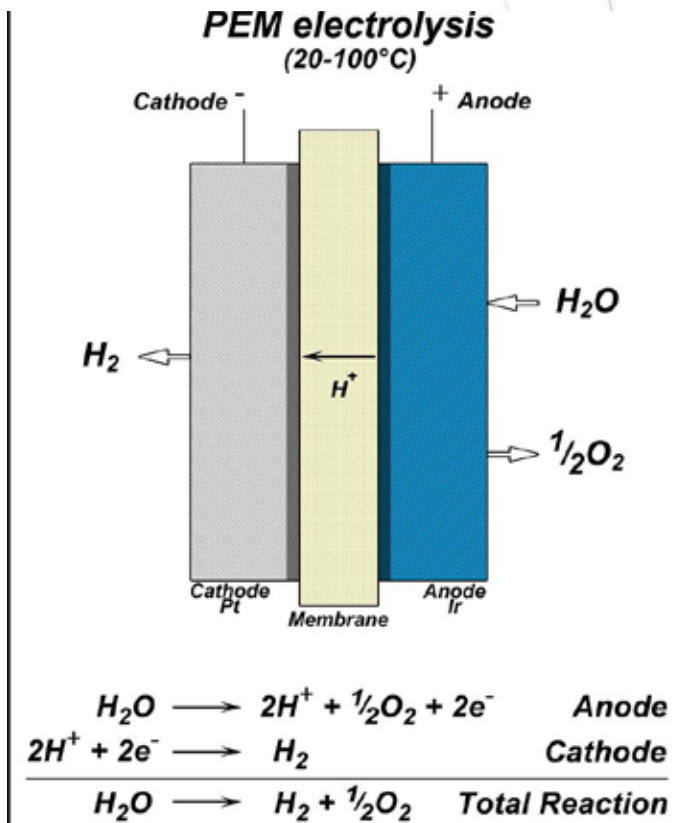
In line with the National Hydrogen Mission, GAIL (India) Limited has awarded a contract to set up one of the largest Proton Exchange Membrane (PEM) Electrolyser in India.

- The project being installed at GAIL's Vijapur Complex would be based on renewable power.
- The Project has been designed to produce around 4.3 Metric Tons of Hydrogen per day (approx. 10 MW capacity) with a purity of about 99.999 Volume %.
- In line with the vision of Atmanirbhar Bharat, the project has been awarded to a vendor having domestic value addition of more than 50 per cent.

What is Proton Exchange Membrane (PEM) Elec-

trolyser?

- Hydrogen is the most efficient energy carrier.
- Hydrogen can be obtained from different sources of raw materials including water.
- Among many hydrogen production methods, eco-friendly and high purity of hydrogen can be obtained by water electrolysis.
- However, in terms of sustainability and environmental impact, PEM water electrolysis was considered as most promising techniques.



- PEM produces high pure efficient hydrogen from renewable energy sources and emits only oxygen as by-product without any carbon emissions.
- Moreover, the produced hydrogen (H_2) and oxygen (O_2) can be directly used for fuel cell and industrial applications.
- PEM electrolysis creates a reaction using an ionically conductive solid polymer, rather than a liquid.
- When voltage is applied between two electrodes, negatively charged oxygen in the water molecules gives its electron, resulting in protons, electrons, and O_2 at the anode.
- The H^+ ions travel through the proton-conducting polymer towards the cathode, where they take an electron and become neutral H atoms.
- These combine to make H_2 at the cathode.

YOUR S
RAO'S ACADEMY

MoU between APEDA and NRDC

The Agricultural and Processed Food Products Export Development Authority (APEDA) signed a Memorandum of Understanding (MoU) with National Research Development Corporation (NRDC).

- The aim of this MoU is to give a boost to the export value chain.



Key Points

The MoU has been signed for the implementation of the Agri Export Policy and to strengthen the export value chain.

- The MoU's mandate is to infuse and disseminate technologies jointly with APEDA in the areas of climate-resilient agriculture related to zero carbon emission farming to produce residue/carbon-free food for exports.
- The key areas of cooperation include:
 - developing and improving farm machinery for low cost,
 - user-friendly and energy-efficient tools for small scale farmers,
 - promoting and supporting Agri Startups associated with the NRDC Incubation Centre (NRDCIC) for engagement in agri-exports and
 - strengthening of the Startup ecosystem and nomination of expert resources of NRDC/APEDA for mutual knowledge sharing.

About NRDC

- NRDC is an enterprise of the Department of Scientific and Industrial Research (DSIR), Ministry of Science & Technology, Government of India.
- It was established in 1953 with the primary objective to promote, develop and commercialize the technologies, know-how, inventions, and patents.
- It has licensed the indigenous technology to more than 4800 entrepreneurs and helped to establish a large number of small and medium scale industries.
- NRDC has also successfully exported technologies and services to both developed as well as the developing countries.

National Industrial Corridor Corporation Projects

Union Minister of Commerce and Industry, Consumer Affairs, Food and Public Distribution and Textiles has urged the States to put the NICDC projects on fast track and set a deadline for acquisition and allotment of land in industrial nodes and clusters.

About National Industrial Corridor Development Programme

National Industrial Corridor Development Programme is India's most ambitious infrastructure programme aiming to develop new industrial cities as "Smart Cities" and converging next generation technologies across infrastructure sectors.

- Government of India is developing various industrial corridor projects as part of the National Industrial Corridor Programme (NICP).
- NICP is aimed at development of futuristic industrial cities in India which can compete with the best manufacturing and investment destinations in the world.
- The same will create employment opportuni-

ties and economic growth leading to overall socio-economic development.

- National Industrial Corridor Development Corporation (NICDC) is implementing 11 corridors comprising 32 projects in four phases.



These 11 corridors are:

- Delhi-Mumbai Industrial Corridor (DMIC)
- Amritsar-Kolkata Industrial Corridor (AKIC)
- Chennai-Bengaluru Industrial Corridor (CBIC)
- Vizag-Chennai Industrial Corridor (VCIC)
- Bengaluru-Mumbai Industrial Corridor (BMIC)
- Odisha Economic Corridor (OEC)
- Hyderabad Nagpur Industrial Corridor (HNIC)
- Hyderabad Warangal Industrial Corridor (HWIC)
- Hyderabad Bengaluru Industrial Corridor (HBIC)
- Extension of CBIC to Kochi via Coimbatore
- Delhi Nagpur Industrial Corridor (DNIC)



About NICDC

National Industrial Corridor Development Corporation (NICDC) is a Special Purpose Vehicle that envisages to establish, promote and facilitate development of the National Industrial Corridor Development Programme.

- After the inception of Delhi Mumbai Indus-

trial Corridor (DMIC) in 2007, a trust fund was set up in the name of DMIC Trust fund to carry out the project development.

- In December 2016, the mandate of DMIC Trust was expanded to include other industrial corridors across India.
- After which, the DMIC Trust was renamed as National Industrial Corridor Development and Implementation Trust (NICDIT).
- A Special Purpose Vehicle, Delhi-Mumbai Industrial Corridor Development Corporation Limited (DMICDC) was incorporated in 2008:
 - as the project development agency for DMIC and knowledge partner for DMIC Trust.

After reconstitution of DMIC Trust as NICDIT, the DMICDC was also renamed as National Industrial Corridor Development Corporation Limited (NICDC) in February, 2020.

Upcoming Projects

A combined investment of Rs. 16,760 crore has been already done in the 4 cities for the 173 allotted plots. The four 'Smart' industrial cities are emerging at:

- Dholera (Gujarat),
- Shendra Bidkin (Maharashtra),
- Vikram Udhogpuri (MP) &
- Integrated Industrial Township in Greater Noida (UP).

Indian Railways augment transportation of Coal

Indian Railways has been a prime supplier of Coal to all Power Houses and has taken substantive measures in year 2021-22.

- During the year 2021-22 Indian Railways has augmented the transportation of Coal through Railways by a record 111 Million tonnes.

Key Points

- Indian Railways also loaded a record 653 Million Tonnes of coal as compared to 542 Million tonnes in the previous year i.e. a growth of 20.4 %.
- Further during the period Sept-21 to Mar-22 loading of coal to power sector was augmented by 32% in just 2 quarters.
- The movement of Coal trains have been pri-

oritized and the each and every train is being intensively monitored.

- Through this prioritization and monitoring, the Transit time of coal trains to long distance Power has been reduced significantly by 12-36% for critical power plants.

Exports of Indian Ceramics and Glassware Products

India's exports of Ceramics & Glassware products for 2021-22 hit a record at US\$ 3464 Million.

- During FY 2013-14; India's Ceramic & Glassware products exports were valued at US\$ 1292 Million.

Key Points

The export growth of Ceramic tiles has been achieved because of a surge in shipments of Ceramic Tiles and Sanitary wares products.

- Today Indian Tile Industry has become global player and earns foreign exchange for the nation with "Make In India" approach.
- India's is World's second largest manufacturer of tiles.
- India exports to more than 125 countries and top destinations include Saudi Arabia, United States, Mexico, Kuwait, and United Arab Emirates among others.
- The surge in Ceramic and Glassware products exports has been achieved because of sustained efforts on the part of the Department of Commerce.
- Also, various initiatives have been taken by CAPEXIL, by using Grant in Aid under Market Access Initiative Scheme.

About CAPEXIL

CAPEXIL, Premier Export Promotion Council, was set up in March 1958 by the Ministry of Commerce, Government of India to promote export of Chemical and Allied Products from India.

- With the headquarters at Kolkata, and regional offices at New Delhi, Mumbai, Kolkata and Chennai, CAPEXIL has more than 4500 members across the country.
- CAPEXIL is an ardent advocate of exporters to the Government and the primary focus is to provide export assistance to its member exporters.
- CAPEXIL sends trade delegation to all major and developing markets around the world, showcases Indian exports all over the world through exhibitions, fairs.

AAHAR 2022

APEDA organised Asia's biggest B2B international food and hospitality fair AAHAR in April, 2022 at Pragati Maidan.

- The aim is to unlock the abundant potential in food and hospitality sector.

Key Points

AAHAR 2022 is organised by Agricultural & Processed Food Products Export Development Authority (APEDA), in association with the India Trade Promotion Organization (ITPO).

- AAHAR is a part of the series of export promotion initiatives taken by APEDA to showcase agricultural and processed food products to the global players in the food and beverages industry.
- Apart from AAHAR, APEDA also organizes national events like Organic World Congress, BioFach India etc to promote agri-exports.
- Notably, more than 150 food and agri Products have been registered as GI by the GI Registry out of which 123 GI products fall under APEDA's category till March, 2022.

About India's Food Sector:

- India's food & grocery market is the 6th largest in the world.
- Indian food sector is a high-growth sector with immense potential for value addition.
- The sector already touched nearly US\$ 500 billion in 2020.
- The food processing industry in India accounts for 32% of the country's total food market & 14% of the manufacturing GDP.
- It is estimated that the food processing sectors have the potential to attract US\$ 33 billion investment in next 10 years.
- As per the DGCI&S data, the agricultural exports have grown by 19.92 per cent during 2021-22 to touch USD 50.21 billion.
- The growth rate is remarkable as it is over and above the growth of 17.66 per cent at USD 41.87 billion achieved in 2020-21.
- Also, APEDA has scripted a new history by exporting agricultural and processed food products to the tune of USD 25.6 billion, which is 51 per cent of the India's total agriculture exports of USD 50 billion.

HUDCO Celebrates its 52nd Formation Day

Housing and Urban Development Corporation Ltd. (HUDCO) recently celebrated its 52nd foundation day.

About HUDCO

The Housing and Urban Development Finance Corporation Private Limited was incorporated in April, 1970, as a private limited company under the Companies Act, 1956.

- Subsequently, the name of our Company was changed to its present name, “Housing and Urban Development Corporation Limited”.
- The main objectives of the Company:
 - to provide long term finance for construction of houses for residential purposes or finance or undertake housing and urban development programmes in the country;
 - to finance or undertake, wholly or partly, the setting up of new or satellite towns;
 - to finance or undertake the setting up of industrial enterprises of building material;
 - to promote and provide consultancy services for the projects of designing and planning of works relating to Housing and Urban Development programmes in India and abroad; among others.
- HUDCO has been instrumental in providing shelter to 1.90 crore urban as well as rural poor to get houses.
- HUDCO also provides financial assistance to the Governmental agencies in the field of infrastructure development of States.

Note: Cumulatively, at end of March 2022, HUDCO has sanctioned a total of 17,326 housing and urban infrastructure projects with a total loan component of Rs. 2,31,465 crore.

Cabinet approves revised cost estimate on “Setting up of IPPB”

The Union Cabinet chaired by the Prime Minister has approved the revision of project outlay for setting up of India Post Payments Bank (IPPB).

Key Points

- The objective of the project is to build the most accessible, affordable and trusted bank for the common man.
- It also enhances the financial inclusion agenda by removing the barriers for the unbanked and reduce the opportunity cost for the under banked populace through assisted doorstep banking.
- The project supplement Government of India’s vision of “less cash” economy and at the same time promote both economic growth

and financial inclusion.

About IPPB

India Post Payments Bank (IPPB) was setup under the Department of Post, Ministry of Communication with 100% equity owned by Government of India.

- IPPB was launched as a pilot project on 30 January 2017 in Ranchi (Jharkhand) and Raipur (Chhattisgarh).
- IPPB has expanded its strength across India covering post offices, through a network of 650 IPPB branches/controlling offices, working on a hub and spoke model.
- IPPB has enable 1.36 lakh Post Offices to provide banking services.
- It has also equipped nearly 1.89 lakh Postmen and Gramin Dak Sevaks with smartphone and biometric device to provide doorstep banking services.
- Since the launch of IPPB, it has opened more than 5.25 crore accounts.
- Out of the 5 crore accounts, 77% of accounts are opened in Rural areas, 48% are women customers with around Rs.1000 crore of deposit.
- Nearly 40 lakh women customers received Direct Benefit Transfer (DBT) into their accounts valued at Rs.2500 crore.
- More than 7.8 lakh accounts have been opened for school students.

Exports of Indian chemicals

Exports of Indian Chemicals has registered growth of 106% in 2021-22 over 2013-14.

- India’s exports of Chemicals for 2021-22 hit a record at US\$ 29296 Million, whereas in 2013-14 India’s Chemical exports was US\$ 14210 Million.

Key Points

- The export growth of Chemicals has been achieved because of a surge in shipments of:
 - Organic, Inorganic Chemicals, Agrochemicals, Dyes and Dye intermediates, Specialty Chemicals.
- India is the 6th Largest producer of Chemicals in the world and 3rd in Asia.
- India ranks 14th position in export of chemicals.
- Today India leads in Dyes production and contributes to 16%-18% to world’s dyestuff exports.
 - Indian Dye is exported to over 90+ countries.

- India is 4th largest producer of agrochemicals in the world and manufacturing more than 50% technical grade pesticides.
 - Almost 50% of agrochemicals are exported from India to the world.
- India is the largest producer and exporter of castor oil in the world and is responsible for almost 85-90 % of total global exports in this segment.
- India exports to more than 175 countries and top destinations are USA, China and new markets viz. Turkey, Russia and North East Asian Countries.



IFSCA Issues Framework for FinTech Entity in the IFSCs

The International Financial Services Centres Authority (IFSCA), has issued a detailed “Framework for FinTech Entity in the IFSCs”.

Key Points

The “Framework for FinTech Entity in the IFSCs” is aimed at giving boost to the establishment of a world class FinTech Hub at GIFT IFSC.

- The framework proposes to cover:
 - (i) financial technology (FinTech) solutions resulting in new business models, applications, linked to financial services regulated by IFSCA and
 - (ii) advanced/innovative technological solutions which aid and assist activities in relation to financial products, financial services and financial institutions (TechFin).
- The framework provides for a dedicated Regulatory Sandbox for FinTech products or solutions namely IFSCA FinTech Regulatory

Sandbox.

- This would enable them to apply and avail Grants under the IFSCA FinTech Incentive Scheme 2022.

About IFSCA

The International Financial Services Centres Authority (IFSCA) has been established on April 27, 2020 under the International Financial Services Centres Authority Act, 2019.

- It is headquartered at GIFT City, Gandhinagar in Gujarat.
- The IFSCA is a unified authority for the development and regulation of financial products, financial services and financial institutions in the International Financial Services Centre (IFSC) in India.
- At present, the GIFT IFSC is the maiden international financial services centre in India.
- Prior to the establishment of IFSCA, the domestic financial regulators, namely, RBI, SEBI, PFRDA and IRDAI regulated the business in IFSC.

Core Industries grow by 10.4%

The cumulative growth rate of Index of Eight Core Industries (ICI) during April-March 2021-22 was 10.4% (provisional) as compared to the last Financial Year.

- The combined Index of Eight Core Industries stood at 157.3 in March 2022, which increased by 4.3 per cent (provisional) as compared to the Index of March 2021.



Key Points

- Final growth rate of Index of Eight Core Industries for December 2021 is revised to 4.1% from its provisional level 3.8%.
- The production of Natural Gas, Refinery Products, Fertilizers, Steel, Cement and Electricity industries increased in March 2022 over the corresponding period.

About Core Industries

- ICI measures combined and individual performance of production in selected eight core industries.
- The core industries are: Coal, Crude Oil, Natural Gas, Refinery Products, Fertilizers, Steel, Cement and Electricity.
- The Eight Core Industries comprise 40.27 percent of the weight of items included in the Index of Industrial Production (IIP).

Khadi Exceeds Turnover of Rs 1 lakh crore

Khadi and Village Industries Commission (KVIC) has achieved a massive turnover of Rs 1.15 lakh crore, which is unprecedented by any FMCG company in the country.

- This makes KVIC the only company in the country to have recorded a turnover of Rs 1 lakh crore.



Key Points

- In FY 2021-22, the overall turnover of KVIC stood at a whopping Rs 1,15,415.22 crore as compared to Rs 95,741.74 crore in the previous year.
- KVIC has thus registered a growth of 20.54% from the year 2020-21.
- Compared to the year 2014-15, the overall production in Khadi and Village Industry sectors in 2021-22 has registered a whopping growth of 172%.
- The gross sales during this period increased by over 248%.

About Khadi and Village Industries Commission (KVIC)

- The Khadi and Village Industries Commission (KVIC) is a statutory body established by an Act of Parliament.
- In April 1957, it took over the work of former All India Khadi and Village Industries Board.
- The broad objectives:
 - The social objective of providing employment.
 - The economic objective of producing saleable articles.
 - The wider objective of creating self-reliance amongst the poor and building up of a strong rural community spirit.
- The KVIC is charged with the planning, promotion, organisation and implementation of programs for the development of Khadi and other village industries in the rural areas.
- Its functions also comprise:
 - building up of a reserve of raw materials,
 - creation of common service facilities for processing of raw materials,
 - provisions of facilities for marketing of KVI products
 - organisation of training of artisans engaged in these industries and
 - encouragement of co-operative efforts amongst them.

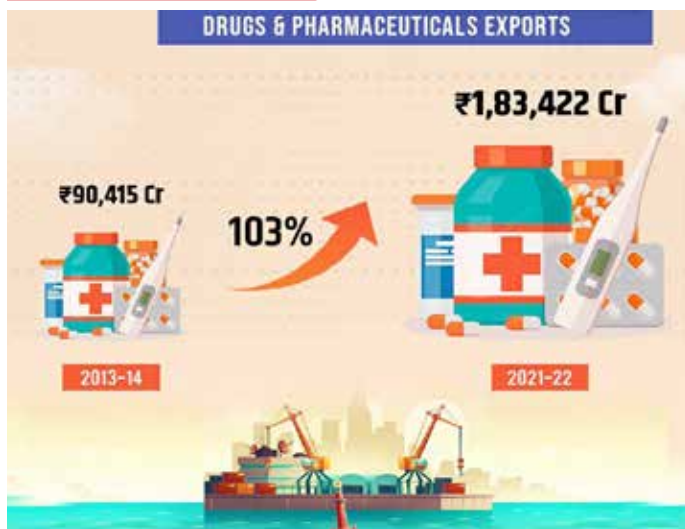
India's Pharma exports

Indian pharma exports witnessed a growth of 103% since 2013-14, from Rs. 90,415 Crores in 2013-14 to Rs. 1,83,422 Crores in 2021-22.

- The exports achieved in 2021-22 is the Pharma Sector's best export performance ever.

Key Points

- The pharma exports in 2021-22 sustained a positive growth despite the global trade disruptions and drop in demand for COVID related medicines.
- The trade balance continues to be in India's favour, with a surplus of USD 15175.81 Million.
- Indian pharma companies enabled by their price competitiveness and good quality, have made global mark.
 - As with 60 per cent of the world's vaccines and 20% of generic medicines are coming from India.
- India ranks 3rd worldwide for production by volume and 14th by value.
- The current market size of the Indian pharmaceutical industry is around USD 50 billion.

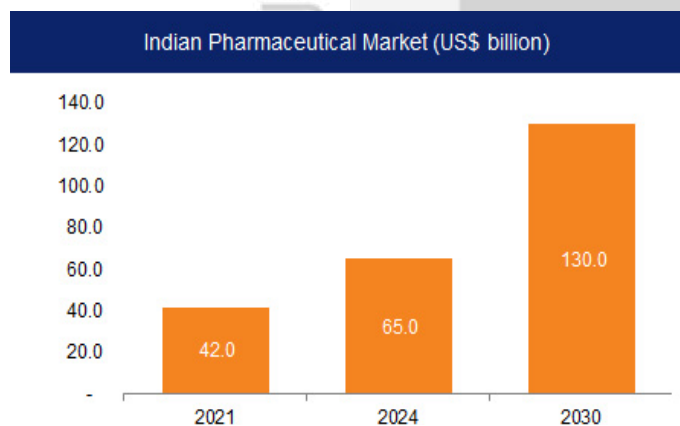


The share of pharmaceutical and drugs in our global exports is 5.92%.

- Formulations and biologicals continue to account for a major share of 73.31% in our total exports, followed by Bulk drugs and drug intermediates.
- India's top 5 pharma export destinations are USA, UK, South Africa, Russia and Nigeria.
- It is also noteworthy that around 55 % of our pharma exports cater to highly regulated markets.
 - Indian pharma companies have a substantial share in the prescription market in the US and EU.
 - The largest number of FDA approved plants outside the US is in India.

Indian Pharma Sector

India's domestic pharmaceutical market is at US\$ 42 billion in 2021 and likely to reach US\$ 65 billion by 2024 and further expand to reach ~US\$ 120-130 billion by 2030.



- The domestic pharmaceutical industry includes a network of 3,000 drug companies and ~10,500 manufacturing units.
- Presently, over 80% of the antiretroviral drugs used globally to combat AIDS (Acquired Immune Deficiency Syndrome) are supplied by Indian pharmaceutical firms.

- India's biotechnology industry comprises bio-pharmaceuticals, bio-services, bio-agriculture, bio-industry, and bioinformatics.
- The Indian biotechnology industry was valued at US\$ 70.2 billion in 2020 and is expected to reach US\$ 150 billion by 2025.
- Indian pharmaceutical exports stood at US\$ 24.44 billion in FY21 and US\$ 22.21 billion in FY22 (until February 2022).
- India is the 12th largest exporter of medical goods in the world.

National Open Access Registry (NOAR)

National Open Access Registry (NOAR) has successfully gone live from 1st May 2022.

- National Load Despatch Centre (NLDC) operated by Power System Operation Corporation Limited (POSOCO) has been designated as the nodal agency for implementation and operation of NOAR.

Key Points

NOAR is a centralized online platform through which the short-term open access to the inter-state transmission system is being managed in India.

- It is an integrated platform accessible to all stakeholders in the power sector, including open access customers.
- The platform provides automation in the workflow to achieve shorter turnaround time for the transactions.
- NOAR platform also has a payment gateway integrated for making payments related to interstate short-term open access transactions.
- NOAR would be the key to facilitate faster electricity markets and enable integration of Renewable Energy (RE) resources into the grid.
- NOAR is part of the Ministry of Power under Government of India.

About Power System Operation Corporation Limited (POSOCO)

- POSOCO is a Government of India enterprise.
- In February, 2009 the National Load Despatch Center (NLDC) was inaugurated.
- Now, these Regional Load Despatch Centers (RLDCs) and National Load Despatch Center (NLDC) is a separate Organization named POSOCO (Power system Operation Corporation Limited).
- Vision: To be a global institution of excellence for reliable & resilient power systems, fostering efficient electricity markets, promoting economy and sustainability.

PLASTINDIA 2023

Union Minister for Chemicals & Fertilizers and Health & Family Welfare launched Plastindia 2023-11th International Plastic Exhibition & Conference.

- PLASTINDIA is a series of exhibitions under the aegis of Plastindia Foundation.

About PLASTINDIA

- PLASTINDIA aims to provide investors and industrialists with a compelling doorway to global markets of commerce and success.
- 10 exhibitions old, today, PLASTINDIA has grown into a global experience, covering the entire gamut of plastics producers, processors and users of plastics.

Established in 1987, Plastindia Foundation is the apex body of major associations, organizations, and institutions connected with plastics, with common objectives to promote the development of the plastics industry and to assist the growth of plastics and related materials.

It witnesses intense participation by both Indian and International Plastics Fraternity.

- It is an international plastics exhibition and conference where national and international exhibitors present their new products and technologies.
- It is an ideal meeting place for buyers and sellers, joint ventures etc. and also enhancement business prospects, strategic alliance and technology transfer.

India's Services Exports Set a New Record

India's Services exports set a new record of USD 254.4 Billion in the financial year 2021-2022.

- The new record achieved in 2021-22 beats the previous high of USD 213.2 Billion in 2019-20.

Key Points

- Telecommunications, computer, and information services, other business services and Transport are the top contributors in Services exports.
- India's overall exports (i.e. Services and Merchandise) touched USD 676.2 Billion in financial year 2021-2022.
- Both Services and Merchandise hit record high exports in financial year 2021-2022.
- India's overall exports were USD 526.6 Billion and USD 497.9 Billion in 2019-20 and 2020-21 respectively.

India Sees the Emergence of the 100th Unicorn

The wave of Unicorns in India has soared to new heights as the country witnessed the birth of its 100th Unicorn on 2nd May 2022.

- Today, 1 out of every 10 unicorns globally have been born in India.

Key Points

- The Indian Startup Ecosystem is the third-largest in the world in number of Unicorns.
- As of May 2022, India is home to 100 unicorns with a total valuation of USD 332.7 billion.
- 2021 experienced a huge surge in the number of unicorns, registering a total of 44 startups entering the Unicorn club through the year with a total valuation of USD 93 billion.
- In the first four months of 2022, India has given birth to 14 unicorns with a total valuation of USD 18.9 billion.
- Since the launch of the Startup India initiative on 16th January 2016, more than 69,000 startups have been recognized in the country.
- Innovation in India is not just limited to certain sectors; we have recognized startups solving problems in 56 diverse sectors.
- These sectors include:- 13% from IT services, 9% healthcare and life sciences, 7% education, 5% professional and commercial services, 5% agriculture, and 5% food & beverages.
- Till FY 2016-17, approximately one unicorn was being added every year.
- Over the past four years (since FY 2017-18), there is a whopping 66% Year-on-Year growth in the number of additional unicorns being added every year.
- The Department for Promotion of Industry and Internal Trade (DPIIT) has recognized startups across 647 Indian districts encompassing all 36 States and Union Territories.

About Startup India

It is a flagship initiative of the Government of India.

- Aimed to build a strong eco-system for nurturing innovation and Startups in the country.
 - So as to drive sustainable economic growth and generate large scale employment opportunities.
- The Government through this initiative aims to empower Startups to grow through innovation and design.
- In order to meet the objectives of the initiative, Government of India announced Startup India Action Plan.
- The Government's Action Plan will help ac-

celerate the growth of Startups throughout India, across all important sectors – in Tier 1, 2 and 3 cities.

- Also including semi-urban and rural areas – and includes promoting entrepreneurship among SCs/STs and women communities.
- The 19-point Action Plan, organized by the Department for Promotion of Industry and Internal Trade (DPIIT), focuses both on restricting hindrances and promoting faster growth.
- The Startup India Action Plan was unveiled by Prime Minister on 16th January, 2016.
- In order to provide funding support to Startups, Government set up a fund with an initial corpus of INR 2,500 crore and a total corpus of INR 10,000 crore over a period 4 years.
 - The Fund will be in the nature of Fund of Funds.
- Credit guarantee mechanism through National Credit Guarantee Trust Company (NCGTC)/ SIDBI has also been envisaged.
- Other benefits:
 - Tax Exemption on Capital Gains
 - Tax Exemption to Startups for 3 years
 - Tax Exemption on Investments above Fair Market Value

Note: Under the Startup India initiative, eligible companies can get recognised as Startups by DPIIT, in order to access a host of tax benefits, easier compliance, IPR fast-tracking & more.



What is a Startup?

A Startup (for the purpose of Government Schemes only) means an entity:

- incorporated or registered in India not prior to five years,
- with an annual turnover not exceeding INR 25 crore in any preceding financial year,
- working towards innovation, development, deployment or commercialization of new products, processes or services driven by technology or intellectual property.

Air Cargo Forum India Annual Event 2022

Union Minister of Civil Aviation attended the annual event of Air Cargo Forum India (ACFI) as the chief guest.

- The theme of the annual event was “10 Million: Vision 2030; Stimulating, Scaling, Steering Air Cargo”.

Key Points

- During the last 2 years in Covid times, cargo sector has emerged as a promising area not just for Indian aviation but for global aviation.
- Indian Cargo Sector has seen a growth rate of 9-10% since 2013-14.
- During the last 2 years, airlines have witnessed 520% increase in cargo revenue.
- As of today, Indian Cargo revenue stands at INR 2,000 crore with 3.1 million metric tonnage having a CAGR of 13%.
- Today, India has 21 international and 35 domestic cargo terminals.
- To achieve the target of 10 million metric ton in cargo, the industry players need to focus on transportation of smaller cargo loads from Tier II & III cities to metros.
 - To facilitate this, GoI is aiming to establish 33 new domestic cargo terminals by 2024-2025.



- Ministry of Civil Aviation will be spending close to INR 98,000 crores over 4 years in terms of setting up new greenfield airports and expansion of existing brownfield airports.
- Out this, INR 62,000 crores will be invested by private sector and INR 36,000 crores will be invested by Government of India through AAI.
- Government, through AAI, will expand 42 brown field airports and setup 3 new greenfield airports.
- Private sector will expand 7 existing brownfield airports and setup 3 new greenfield airports including Navi Mumbai, Jewar and Mopa.

Note: Air Cargo Forum India (ACFI) is an association of various stakeholders of Air Cargo Logistic Supply Chain Trade and Industry.

Regulatory framework for special purpose acquisition companies (SPACs)

The government is reportedly considering a regulatory framework for special purpose acquisition companies (SPACs).

What are SPACs?

- An SPAC, or a blank-cheque company, is an entity specifically set up with the objective of acquiring a firm in a particular sector.
- An SPAC aims to raise money in an initial public offering (IPO) without any operations or revenues.
- The money that is raised from the public is kept in an escrow account, which can be accessed while making the acquisition.
- If the acquisition is not made within two years of the IPO, the SPAC is delisted and the money is returned to the investors.

Why are they attractive?

- While SPACs are essentially shell companies, a key factor that makes them attractive to investors are the people who sponsor them.
- Globally, prominent names have participated in SPACs.

SPACs in India

- Of the 1,145 IPOs by blank-cheque companies since 2009, 248 happened in 2020, 613 in 2021, and 58 in 2022 so far.
- The gross proceeds raised by SPACs amounted to over \$83 billion in 2020 and \$162 billion in 2021.
- The number for 2022 has crossed \$10 billion already.

18000 km of National Highways in 2022-23

Union Minister for Road Transport and Highways has said that the ministry is committed to the aim of constructing 18,000 km of NHs in 2022-23 at a record speed of 50km per day.

- The overall target is to develop 2 lakh Kms of National Highway Network by 2025.

Key Points

- The ministry is developing 22 Greenfield access control expressways to reduce travel time.
- The priority is to bring down the cost of logistics to 10 per cent from the current 14-16 per cent of GDP.
- It is 8-10 per cent in China and 12 per cent in European countries.
- These infrastructure projects are well inclined with the PM Modi's Gati-Shakti National plan.
- The multi-modal connectivity will provide integrated and seamless connectivity for the movement of people, goods and services from one mode of transport to another.

Building Highways for New India

Target for the Year 2022-23

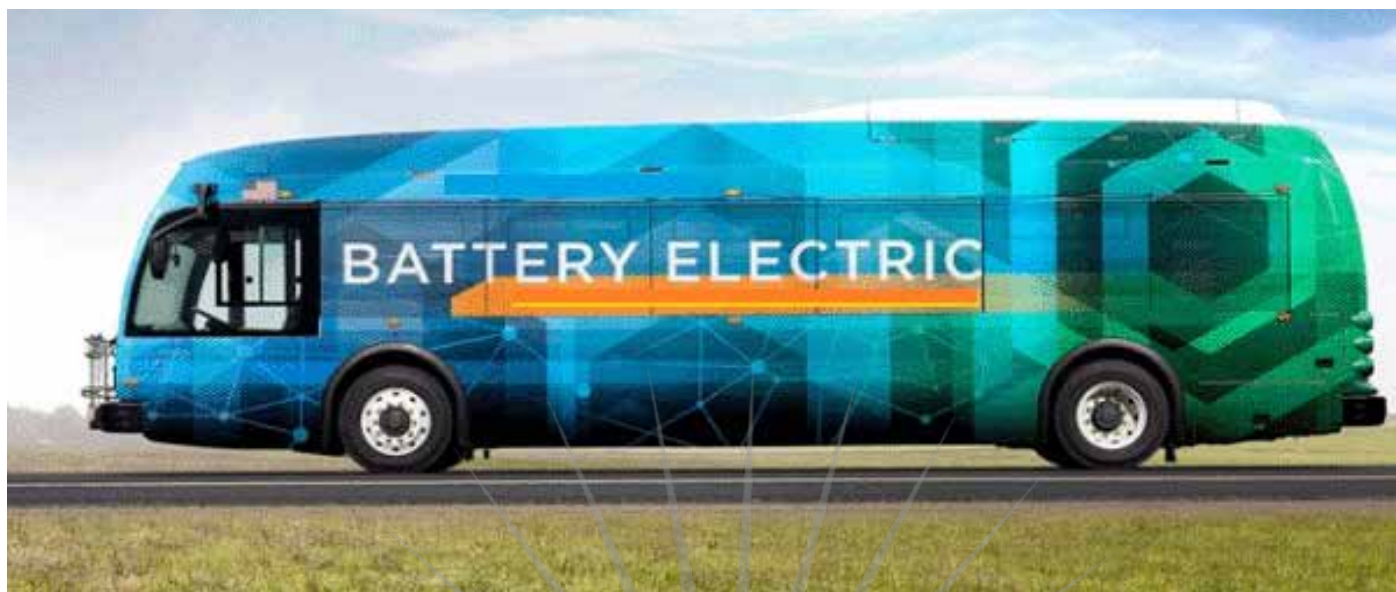
- Projects Award: **18,000 km**
- Construction: **18,000 km**
- Construction Rate: **50km/day**

Overall Target

- To develop 2 Lakh kms of National Highway Network by 2025
- Constructing World Class Road Infrastructure in Time Bound & Target Oriented Way!

Road Infrastructure ~ the 'Atma' of Atmanirbhar Bharat

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CESL discovers lowest ever prices for buses under the FAME II Scheme

Convergence Energy Services Limited (CESL), a PSU under Ministry of Power announced prices discovered for the biggest ever demand for electric buses.

- The Grand Challenge tender comprises demand for 5450 buses across five major Indian cities – Kolkata, Delhi, Bangalore, Hyderabad and Surat.

Key Points

- Prices discovered are the lowest ever and more importantly, at par with or very close to the operational cost of diesel buses.
- The lowest price discovered for a 12-meter bus is Rs. 43.49/km, and a 9-m bus is Rs. 39.21/km.
 - This includes the cost of electricity for charging of the buses.
- Prices realized set a benchmark for public transport, the price point for which may encourage even the smaller cities to adopt electric vehicles.
- The buses are expected to operate around 4.71 billion kilometers over twelve years saving 1.88 billion litres of fossil fuel.
- This will result in eliminating 3.31 million tonnes of CO₂e from tailpipe emissions, a major step towards mitigating climate change.
- Buses will benefit from the central Government subsidy offered under the remodelled

FAME II scheme administered by the Ministry of Heavy Industries.

About FAME scheme

Faster Adoption and Manufacturing of Hybrid & Electric Vehicles in India is the Initiative of the Government to reduce the use of Diesel and Petrol Powered Vehicles in the country.

- The project is an integral part of the Government's National Electric Mobility Mission Plan (NEMMP).
- The scheme is being implemented and overseen by the Ministry of Heavy Industries and Public Enterprises.
- The scheme aims to encourage progressive induction of reliable, affordable and efficient electric and hybrid vehicles (xEV).
- The First Phase of the scheme was initially approved for a period of 2 years, commencing from 1st April, 2015.

About FAME II scheme

Government has approved Phase-II of FAME Scheme with an outlay of Rs. 10,000 Crore for a period of 3 years commencing from 1st April 2019.

- Out of total budgetary support, about 86 per cent of fund has been allocated for Demand Incentive so as to create demand for xEVs in the country.
- This phase aims to generate demand by way of supporting 7000 e-Buses, 5 lakh e-3 Wheelers, 55000 e-4 Wheeler Passenger Cars (including

Strong Hybrid) and 10 lakh e-2 Wheelers.

World Intellectual Property Day

**WORLD
INTELLECTUAL
PROPERTY
DAY** April 26



Every April 26, we celebrate World Intellectual Property Day to learn about the role that intellectual property (IP) rights play in encouraging innovation and creativity.

- World Intellectual Property 2022 recognizes the huge potential of young people to find new and better solutions that support the transition to a sustainable future.

Key Points

This year the theme of World Intellectual Property Day is “IP and Youth: Innovating for a Better Future” and celebrates youth-led innovation and creativity.

- CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR) also organized a National Workshop on World Intellectual Property Day.

Impact of Forest Fires in solar power production

A new study has found that forest fires which plague different parts of India, especially during the summer season play a major role in reducing solar power production in India.

Key Points

- Such analysis of the energy and financial losses due to the direct and indirect effects of forest fires on the production of solar plants can help grid operators.
- The analysis could be used to plan and schedule power generation, as also the distribution, supply, security, and overall stability of power production.
- Recently, solar energy generation has been widely used in developing countries such as India which has sufficient solar resources.
- However, several factors like clouds, aerosols,

and pollution generated from various sources limit the solar irradiance.

- This causes performance issues in the photovoltaic and concentrated solar power plant installations.
- Large-scale development of a solar energy system requires proper planning, and there is a need to estimate the solar potential.
- This study was done by a group of researchers at the Aryabhata Research Institute of Observational Sciences (ARIES), Nainital.
- The study shows that massive forest fire events lead to attenuation of total solar radiation incident on a horizontal surface by 0-45%.

India launches Digital India RISC-V (DIR-V)

Digital India RISC-V Microprocessor (DIR-V) Program was recently announced with an overall aim to enable creation of Microprocessors for the future in India.



Key Points

- DIR-V program is aimed to catalyze the country's semiconductor ecosystem through mass production of next generation indigenous microprocessors.
- The Indian government has set a target of achieving the production of heavy-grade commercial silicon and design wins by December 2023.
- In the same pursuit, five MoUs have been signed between the government and entities like Sony India, ISRO, BEL, etc. for promoting use of indigenously developed RISC-V microprocessors Shakti and Vega.

Note: This program is a component of the Semicon India program, which is aimed at positioning India as a global hub for electronic system design and

manufacturing.

- India mainly relies on semiconductor imports and the ongoing chips shortage is affecting production capacity among automotive, consumer electronics, and mobile handset makers.
- Consequently, the DIR-V program intends to make India self-reliant in semiconductor technology.
- The IIT Madras Director Professor V. Kamakoti has been named the Chief Architect of the DIR-V program
 - While C-DAC Scientist Krishnakumar Rao has been named Program Manager.

About Indigenous microprocessors: Shakti and Vega

The Indian Institute of Technology (IIT) Madras, in partnership with the Centre for Development of Advanced Computing (C-DAC), have indigenously developed two open-source microprocessors named Shakti (32 bit) and Vega (64 bit), respectively.

- The program is under the purview of the Ministry of Electronics and Information Technology's (MeitY) "Microprocessor Development Programme".

What is the Semicon India program?

- India announced the Semicon India Program on December 15, 2021.
- The program intends to catalyze India's semiconductor ecosystem in order to compete with other bases in Asia to reduce India's import dependencies.
- The government hopes to attract large global chip makers to make India their production base.

India wants to achieve technological leadership in these areas of strategic importance.

Source: pib.gov.in and india-briefing.com

RISC-V is an open standard instruction set architecture (ISA) based on established RISC principles. Five refers to the number of generations of RISC architecture that were developed. Unlike most other ISA designs, RISC-V is provided under open source licenses that do not require fees to use.

New Premium Quality Wheat Variety

Researchers have developed a wheat variety, with excellent baking quality having soft and sweet chapatis.



- The wheat variety called 'PBW1Chapati' has been released at state level in Punjab for cultivation under timely sown irrigated conditions.

Key Points

- Tall traditional wheat variety C 306 has been the golden standard for chapati quality.
- Later, PBW 175 variety was developed by PAU and had good chapati quality.
- However, both these have become susceptible to stripe and brown rusts.
- The challenge was to combine high yield potential and disease resistance and retains the actual chapati quality.
- Taking up the challenge, the wheat breeding team from Punjab Agricultural University have developed a new variety.
- The new variety 'PBW1Chapati' got a great push from Department of Science and Technology PURSE grant under the theme SWASTH BHARAT.

AAI successfully conducts flight trials using GAGAN

Airports Authority of India (AAI) successfully conducted light trial using GAGAN (GPS Aided GEO Augmented Navigation) based LPV Approach Procedures.

- India is the first country in Asia Pacific Region to achieve such a landmark.

Key Points

The successful trial is a great achievement and major milestone in field of Air Navigation Services (ANS) in the history of Indian Civil Aviation Sector.

- LPV (Localizer Performance with Vertical Guidance) permits aircraft guided approaches without the need for ground-based navigational infrastructure.
- The service relies on the availability of GPS and GAGAN Geo Stationary Satellites.

LPV is a Satellite Based Procedure will make it possible to land at airports not equipped with expensive Instrument Landing Systems, such as many small regional and local airports

About LPV

- Localiser Performance with Vertical Guidance (LPV) is a subset of Area Navigation (RNAV) Approach.
- Approaches to LPV minima have characteristics which are very similar to an Instrument Landing System (ILS) approach.
- The fundamental difference between the two is the source of the guidance signals.
- Whilst an ILS is a ground-based approach, necessitating the associated transmitters and antennae for each individual runway.
- The source for RNAV LPV guidance is the space based Global Navigation Satellite System (GNSS).
- It can hence be used to simultaneously provide the guidance to an unlimited number of aircraft conducting concurrent approaches at multiple locations.

About GAGAN

GAGAN is an acronym for GPS Aided GEO Augmented Navigation.

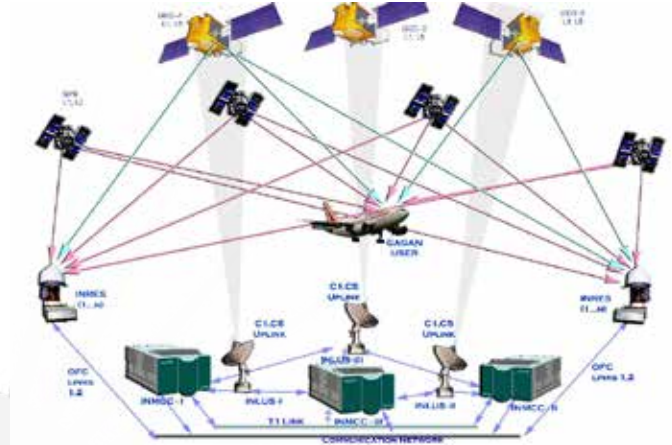
- It is a Space Based Augmentation System (SBAS) jointly developed by ISRO and AAI.
- Aim is to provide the best possible navigational services over Indian FIR (Flight Information Region) with the capability of expanding to neighbouring FIRs.
- The system is inter-operable with other international SBAS systems like US-WAAS, European EGNOS, and Japanese MSAS etc.
- GAGAN GEO footprint extends from Africa to Australia and has expansion capability for seamless navigation services across the region.

Working of GAGAN?

- GAGAN is a system of satellites and ground stations that provide GPS signal corrections, giving you better position accuracy.
- GAGAN consists of set of ground reference stations positioned across various locations in India called Indian Reference Station (INRES), which gathers GPS satellite data.
- A master station, Indian Master Control Centre (INMCC) collects data from reference stations and create GPS correction messages.
- The corrected differential messages are uplinked via Indian Uplink Station (INLUS).
- Then broadcasted on a signal from three geostationary satellites (GSAT-8, GSAT-10 and

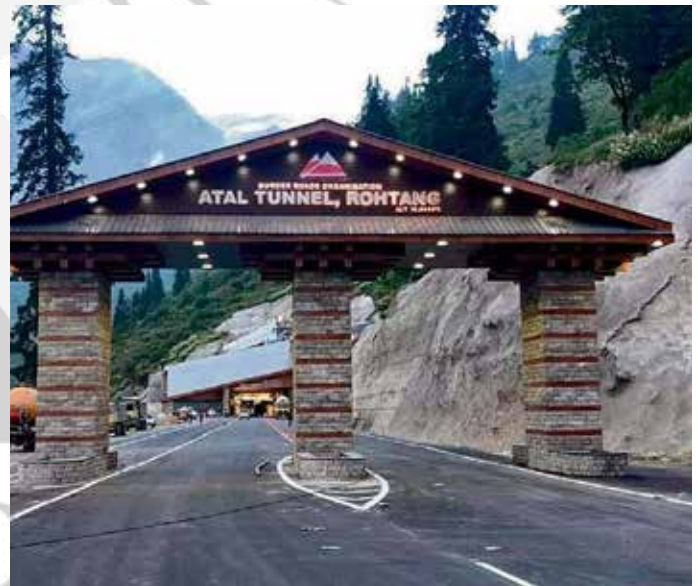
GSAT-15).

- The information on this signal is compatible with basic GPS signal structure, which means any SBAS enabled GPS receiver can read this signal.
- The GAGAN system provides Non-precision approach (NPA) service accurate to within the radius of 1/10th of a nautical mile.



Atal Tunnel receives IBC Best Infrastructure Project award

Atal Tunnel built in Rohtang of Himachal Pradesh received Indian Building Congress (IBC) 'Best Infrastructure Project' award.



- This engineering marvel was constructed by BRO connecting Manali to the Lahaul-Spiti Valley.

Key Points

- The tunnel, built by using the New Austrian Tunneling Method (NATM) was dedicated to the Nation in Oct, 2020.
- It has been equipped with a semi-transverse ventilation system, where large fans separately

circulate air throughout the tunnel.

- An emergency tunnel has been integrated into the tunnel cross-section beneath the main carriageway for evacuation during emergencies.
- Fires inside the tunnel will be controlled with- in an area of 200 metres and fire hydrants are provided at specific locations throughout the tunnel.
- Pollution sensors continuously monitor the air quality in the tunnel.
 - And if the air quality in the tunnel is below the desired level, fresh air is injected into the tunnel via two heavy duty fans on each side of the tunnel.
- The tunnel provides Armed Forces a strategic advantage by providing an alternate link to the critical Ladakh Sector.
 - Besides being boon for the residents of Lahaul & Spiti District in Himachal Pradesh.

Note: Atal Tunnel has officially been certified by World Book of Records, as the ‘World’s Longest Highway Tunnel above 10,000 Feet’

SemiconIndia Conference 2022

The inaugural ‘SemiconIndia 2022’ Conference is being organised by India Semiconductor Mission in partnership with industry and industry associations.

- Aim to make India a global hub for Semiconductor Design, Manufacturing and Technology Development which will help propel the vision of India Semiconductor Mission.

Key Points

- Theme: Catalyzing India’s Semiconductor Ecosystem
- Vision: To position India on the Semiconductor map of the world and build a vibrant semiconductor innovation and manufacturing ecosystem.
- The below Memorandum of Understanding (MOU) were also inked:
 - MOU signed between SEMI and ELCINA to promote semiconductor ecosystem in India.
 - MOU between CDAC and Qualcomm for partnership in semiconductors which will target semiconductor design startups.
 - MOU between AICTE and SEMI and ISM for training and skilling tech workforce for the semiconductor sector.

Note: India Energy Storage Alliance (IESA) launched an industry report on ‘Semiconductor manufacturing supply chain – India’s opportunity in the

global market”.

About India Semiconductor Mission

India Semiconductor Mission (ISM) is a specialized and independent Business Division within the Digital India Corporation that aims to build a vibrant semiconductor and display ecosystem.

- Aim: to enable India’s emergence as a global hub for electronics manufacturing and design.

Qualcomm and C-DAC partner to support Indian semiconductor startups

Qualcomm India Private Limited (Qualcomm India), part of the Qualcomm group of companies (NASDAQ: QCOM), plans to initiate and conduct the Qualcomm® Semiconductor Mentorship Program (‘QSMP’) 2022.

Key Points

- The program will be for select startups from the semiconductor space in India, with an intent to provide and facilitate mentorship, technical training, and industry outreach.
- For 2022, Qualcomm India has announced a collaboration with the C-DAC, an autonomous scientific society of the Ministry of Electronics and Information Technology.
- C-DAC will be an outreach partner for the program and facilitate exposure for the participating startups.
- Qualcomm India will shortlist up to 10 Indian semiconductor startups for QSMP 2022.
- Each shortlisted startup will be paired with a Qualcomm India leader for mentorship on product planning and development.



About Qualcomm

Qualcomm is an American multinational corporation headquartered in San Diego, California.

- It creates semiconductors, software, and services related to wireless technology.

About C-DAC

Centre for Development of Advanced Computing (C-DAC) is the premier R&D organization of the Ministry of Electronics and Information Technology (MeitY).

- The setting up of C-DAC in 1988 itself was to build Supercomputers in context of denial of import of Supercomputers by USA.
- Since then C-DAC has been undertaking building of multiple generations of Super-computer starting from PARAM with 1 GF in 1988.
- Almost at the same time, C-DAC started building Indian Language Computing Solutions with setting up of GIST group (Graphics and Intelligence based Script Technology).

Centre pushes for increased exports of tissue culture plants

Agricultural and Processed Food Products Export Development Authority (APEDA), conducted a webinar on “Export Promotion of Tissue Culture Plants such as Foliage, Live Plants, Cut Flowers, and Planting Material”.

- The webinar was conducted in partnership with Department of Biotechnology (DBT) accredited tissue culture laboratories spread across India.

Key Points

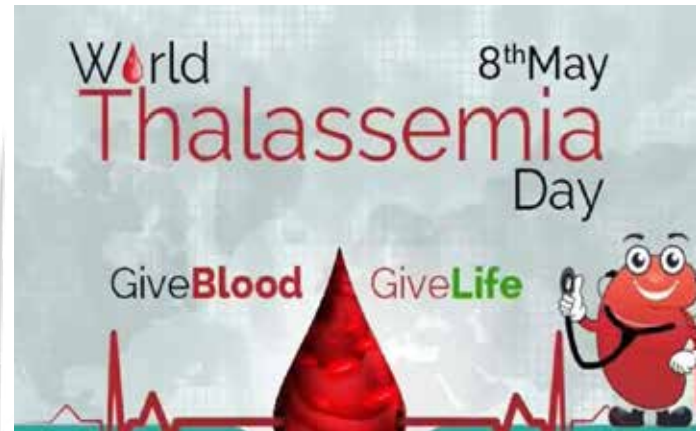
- The top ten countries importing tissue culture plants from India are the Netherlands, USA, Italy, Australia, Canada, Japan, Kenya, Senegal, Ethiopia and Nepal.
- In 2020-2021, India’s exports of tissue culture plants stood at US\$17.17 million, with the Netherlands accounting for around 50% of the shipments.
- APEDA is running a Financial Assistance Scheme (FAS) to help laboratories upgrade themselves so as to produce export quality tissue culture planting material.
- It also facilitates exports of tissue culture planting material to diversified countries.

About Tissue Culture

- Tissue culture (TC) is the cultivation of plant cells, tissues, or organs on specially formulated nutrient media.
- Under the right conditions, an entire plant can be regenerated from a single cell.
- Tissue culture is seen as an important technology for developing countries for the pro-

duction of disease-free, high quality planting material and the rapid production of many uniform plants.

World Thalassaemia Day



On the occasion of World Thalassaemia Day, Union Minister for Tribal Affairs virtually addressed the webinar “Challenges in Thalassaemia 2022”.

- It was jointly organized by Ministry of Tribal Affairs along with various ministries and Thalassaemia association.

Key Points

- International Thalassaemia Day is celebrated on May 8 every year to raise awareness.
- It is prevalent in the Mediterranean area, the Middle East and Southeast Asia, and the Pacific.

About Thalassaemia

The thalassaemias are inherited blood disorders characterized by decreased haemoglobin production.

- There are two main types of thalassaemia:
 - α -thalassaemia (or alpha thalassaemia) occurs when a gene or genes related to the α -globin protein are missing or changed (mutated), and
 - β -thalassaemia (or beta thalassaemia) occurs when similar gene defects affect production of the β -globin protein.
- Both alpha and beta thalassaemia may be found in two forms.
- Thalassaemia major: In this type of disease, faulty genes are received from both parents.
 - People with this disease may have severe anaemia, slowed growth and delayed puberty, and problems with the spleen, liver, heart, or bones.
 - Symptoms usually appear during the first two years of life.
- Thalassaemia minor: People with this form of

the disorder are carriers of the disease.

- Most of the time, they do not have symptoms.
- Thalassaemia minor occurs when faulty genes are received from one parent.
- Thalassaemia can be diagnosed by blood tests.
- It is a treatable disorder that can be managed with blood transfusions and chelation therapy.
- Some children can be cured by bone marrow transplant.

What is Hemoglobin (Hb)?

- Hemoglobin (Hb) is the protein contained in red blood cells that is responsible for delivery of oxygen to the tissues.
- To ensure adequate tissue oxygenation, a sufficient hemoglobin level must be maintained.



- M/s VVDN Technologies Private Limited is an Indian product engineering and manufacturing company working in various technology domains including 5G, Networking, IoT, Cloud & Apps.

Key Points

- MoU was signed by Telecommunication Engineering Centre (TEC), a technical arm

NASA is expected to launch its Europa Clipper in 2024. The module will orbit Jupiter and conduct multiple close flybys to Europa to gather data on the moon's atmosphere, surface and its interior.

- of the Department of Telecommunications

(DoT).

- The signing of MoU will facilitate registered startups, innovators and MSMEs working in the field of Open RAN to get their product tested at the existing lab of M/s VVDN.
- Such testing certification shall accelerate the research innovation domestic design and manufacturing.
- It is aimed that India shall be emerging as design leader in 5G/ORAN.
- This test certification eco system will make India as design testing and certification hub of Asia.

What is Open RAN?

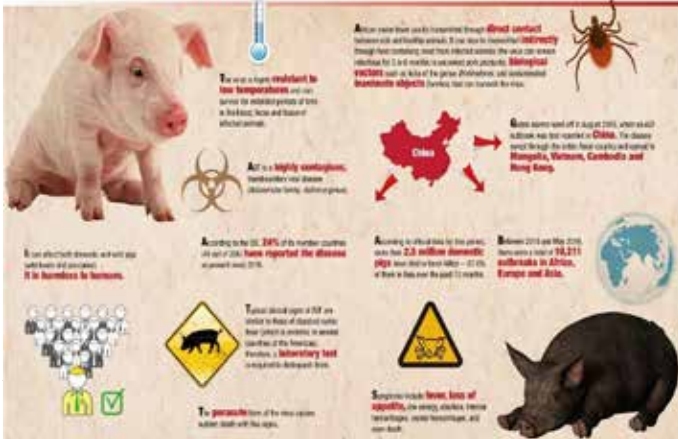
The mobile, or cellular/wireless network comprises two domains: the Radio Access Network (RAN) and the Core Network (Core).

- The RAN is the final link between the network and the phone.
- It is the visible piece and includes the antennae we see on towers, on top of buildings, or in stadia, plus the base stations.
- When we make a call or connect to a remote server e.g., to watch a YouTube video, the antenna transmits and receives signals to and from our phones or other hand-held devices.
- The signal is then digitalized in the RAN base station and connected to the network.
- Radio-access networks (RAN) serve to connect the base stations that transmit and receive traffic to from endpoints like cell phones and laptops and provide the link toward the carrier core network.
- Whilst it was always possible for operators to have one vendor for their core network and a separate vendor for the RAN, interoperability between RAN equipment from different vendors is difficult and not encouraged.
- Open RAN is a collaboration of equipment makers and telecoms in various working groups to solve this interoperability problem by creating standards.
- As long as equipment meets open RAN standards it should be compatible with gear made by any other vendor whose gear also meets the standards.
- Without having to rely on one vendor for all the equipment, carriers and enterprises have more opportunity to shop around for the best deal on each piece.
- In an Open RAN environment, the RAN is

disaggregated into three main building blocks:

- the Radio Unit (RU)
- the Distributed Unit (DU)

African swine fever (ASF)



After African Swine Fever (ASF) cases were reported in a breeding farm in Sepahijala district, the Tripura government has decided to go in for mass culling of infected pigs at the farm.

About African Swine Fever (ASF)

- ASF is a highly contagious and fatal animal disease that infects domestic and wild pigs, typically resulting in an acute form of haemorrhagic fever.
- It was first detected in Africa in the 1920s.
- The mortality is close to 100 per cent, and since the fever has no cure, the only way to stop it spreading is by culling the animals.
- As of now, there is no approved vaccine, which is also a reason why animals are culled to prevent the spread of infection.

Jupiter's moon Europa

Researchers have said that there might be an abundance of water pockets beneath formations called double ridges on Jupiter's moon Europa.

- Europa's surface is mostly solid water ice.

Key Points

- Double ridges are the formations which are most common on Europa's surface and are similar to those seen on Earth's Greenland ice sheet.
- Europa is slightly smaller than Earth's moon

and its diameter is about one-quarter that of the Earth.

- Europa has a very thin oxygen atmosphere.

Interestingly, while its diameter is less than the Earth's, Europa probably contains twice the amount of the water in all of the Earth's oceans.



Dengue fever

Rajasthan has reported 467 cases of dengue from January 1 to April 12 even before the arrival of the monsoon.

- In 2018 also, dengue was declared a perennial infection in the state.

About Dengue Virus

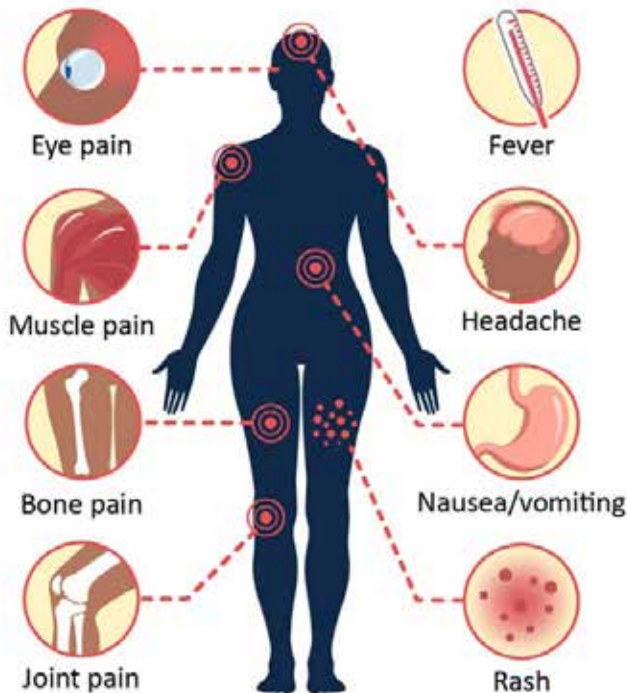
- Dengue virus is transmitted through the bite of a female Aedes (Ae.) mosquito.
 - These mosquitoes are also vectors of chikungunya, yellow fever and Zika viruses.
- Aedes is a day time feeder and can fly up to a limited distance of 400 meters.
- Although it usually results in mild illness, severe dengue infections can sometimes prove fatal.
- Almost half of the world's population, about 4 billion people, live in areas with a risk of dengue.
- Each year, up to 400 million people get

infected with dengue. Approximately 100 million people get sick from infection, and 40,000 die from severe dengue.

- These viruses are related to the viruses that cause West Nile infection and yellow fever.
- Dengue is found in tropical and sub-tropical climates worldwide, mostly in urban and semi-urban areas.

Dengue Symptoms

Fever with any of the following



Aluminide coatings can increase corrosion resistance

Scientists have developed low-cost Fe-based inter-metallic powders that can be used as a corrosion-resistant coating.

- The coatings showed 4 times increased corrosion resistance in the aqueous corrosive media than the mild steel.

Key Points

- These corrosion-resistant coatings can be used for materials exposed to harsher environments like high temperature in thermal power plants.
 - In such harsh temperatures oxidation, corrosion, and wear and tear takes place simultaneously.
- Wear and corrosion cause major damage over a range of service temperatures.
- Hence, there is a need to protect the component surface with a suitable material for enhanced economic viability.

- Such surface coating on a turbine blade can enhance the service life and hence increases the operation hours of turbine.
- At present, thermally sprayed Chromium Carbide-Nickel Chromium Powder and Tungsten Carbide coatings have been widely used.
- However, the powders are expensive due to presence of Co and Ni elements.
- Besides, Cr is toxic in its hexavalent state.
- Replacement of these coatings with simple Fe-based coatings with novel microstructural constituents is very promising.
- The coatings have demonstrated an increased wear resistance by 30-40% than the mild steel under solid particle erosion wear mode.
 - This implies that FeAlCr coatings can be used for high-temperature erosion resistance applications.

National Technology Day

National Technology Day is commemorated as an achievement of India's technical advances, since on May 11, 1998, the country successfully tested nuclear weapons in Pokhran.



Key Points

- National Technology Day is observed in India to honour the remarkable hard work and achievements of Indian scientists.
- Every year, the Technology Development Board of India celebrates the day by awarding individuals with the National Award for their contribution to science and technology in India.

About Technology Development Board of India

- The Government of India constituted the Technology Development Board (TDB) in September 1996, under the Technology

Development Board Act, 1995, as a statutory body.

- Aim: to promote development and commercialization of indigenous technology and adaptation of imported technology for wider application.
- The TDB is the first organization of its kind within the government framework with the sole objective of commercializing the fruit of indigenous research.

About Pokharan Test

- The Pokhran-II tests were a series of five nuclear bomb test explosions conducted by India at the Indian Army's Pokhran Test Range in May 1998.
 - Pokhran-II was codenamed as Operation Shakti.
- It was the second instance of nuclear testing conducted by India; the first test, codenamed Smiling Buddha, was conducted in May 1974.

BRAHMOS AIR

India successfully fired the Extended Range Version of BrahMos Air Launched missile from Su-30 MKI fighter aircraft.

- The launch from the aircraft was as planned and the missile achieved a direct hit on the designated target in the Bay of Bengal region.

Key Point

- It was the first launch of Extended Range version of BrahMos missile from Su-30MKI aircraft.
- With this, the IAF has achieved the capability to carry out precision strikes from Su-30MKI aircraft against a land/ sea target over very long ranges.
- The extended range capability of the missile coupled with the high performance of the Su-30MKI aircraft gives the IAF a strategic reach and allows it to dominate the future battle fields.

History of BrahMos

- The year 1983 opened a new chapter in India's defence history.
- Decision makers along with the scientific community embarked on an ambitious programme to address the country's defence requirements.
- This gave way to the Integrated Guided Missile Development Programme (IGMDP).

- The project was aimed at achieving self-sufficiency in missiles programme by developing and producing a comprehensive range of missiles.
- However, after the Gulf War of 1990s, it was felt increasingly necessary to equip the country with a cruise missile system.
- It was at that time when India's decades-old bonhomie with Russia, without disturbing the unique balance in the Non-alignment policy, came to the forefront.
- As a result, Dr. A P J Abdul Kalam, former President of India, also a missile technologist, and N V Mikhailov, Russia's first Deputy Defence Minister, signed an Inter-Governmental Agreement in Moscow on February 12, 1998.
- It paved the way for BrahMos Aerospace - the joint venture entity between India's Defence Research and Development Organisation (DRDO) and Russia's NPO Mashinostroyeniya (NPOM).
- As per the pact, the two sides consented to jointly develop and produce the missile, with India holding a 50.5% share and Russia the other 49.5% share in the JV.
- On July 9, 1999, the first contract was signed under which the company received \$123.75 million from the Russian government and \$126.25 million from India.
- Work on the project began the same year in several specialized laboratories of DRDO and NPOM.
- The first successful launch of BRAHMOS took place on June 12, 2001.
- The missile was test fired from its land-based launcher at the Interim Test Range off the Chandipur coast in Orissa.
- The system is in service with the Indian Army, Indian Navy and Indian Air Force.



Brahmos: Complex yet Universal Weapons System

- Ship based weapon-
 - BrahMos missile is capable of hitting sea or land based targets beyond radar horizons.
 - It can be launched in either inclined or vertical configuration based on the

- type of the ship or user requirements.
- Land based weapon-
 - BrahMos Land based Weapon Complex comprises of four to six Mobile Autonomous Launchers (MAL) controlled by a Mobile Command Post (MCP), and a Mobile Replenishment Vehicle.
- Air launched weapon-
 - The highly advanced air-launched cruise missile (ALCM) with precision attack capability against sea and land targets has been designed and developed for IAF's frontline air combat platform Sukhoi-30MKI.
- Submarine based weapon-
 - BrahMos missile is capable of being launched from submarine from a depth of 40-50 metres.
 - The missile is installed in a modular launcher vertically in the pressure hull of the submarine.

More about Brahmos Missile

- BRAHMOS is a two-stage missile with a solid propellant booster engine as its first stage which brings it to supersonic speed and then gets separated.
- The liquid ramjet or the second stage then takes the missile closer to 3 Mach speed in cruise phase.
- Stealth technology and guidance system with advanced embedded software provides the missile with special features.
- The missile has flight range of up to 290-km with supersonic speed all through the flight.

- It operates on 'Fire and Forget Principle', adopting varieties of flights on its way to the target.
- Its cruising altitude could be up to 15 km and terminal altitude is as low as 10 meters.
- It carries a conventional warhead weighing 200 to 300 kgs.
- BRAHMOS is the first supersonic cruise missile known to be in service.

About Integrated Guided Missile Development Programme (IGMDP)

- The Integrated Guided Missile Development Programme (IGMDP) was conceived by renowned scientist Dr. A P J Abdul Kalam.
- Aim: to enable India attain self-sufficiency in the field of missile technology.
- The IGMDP finally got the approval from the Government of India in 1983.
- The missiles developed under the programme are:--
 - Short-range surface-to-surface ballistic missile Prithvi
 - Intermediate-range surface-to-surface ballistic missile Agni
 - Short-range low-level surface-to-air missile Trishul
 - Medium-range surface-to-air missile Akash
 - Third generation anti-tank missile Nag
- After achieving the goal of making India self-reliant in missile technology, DRDO on January 8, 2008, formally announced successful completion of IGMDP.

RAO'S ACADEMY

Department of Food and Public Distribution (DFPD) gets Prime Minister's Award for Excellence

The Department of Food and Public Distribution (DFPD) received the prestigious Prime Minister's Award for Excellence in Public Administration, 2020 for its scheme 'One Nation One Ration Card' (ONORC).

- The award was presented under the category Innovation (General)-Central.

About ONORC

- The landmark plan of ONORC is a country-wide innovation that allows all NFSA beneficiaries, particularly migrant beneficiaries, to claim either full or part foodgrains from any Fair Price Shop (FPS).
- These benefits could be availed anywhere in the country through existing ration card with biometric/Aadhaar authentication in a seamless manner.
- The system also allows their family members back home, if any, to claim the balance of foodgrains on same the ration card.
- The ONORC which was started initially in 4 States in August 2019.
- It was then swiftly rolled out in a very short span of time in 32 States/UTs by December 2020.
- Since then, progressively in a phase-wise manner, the ONORC plan is presently enabled in 35 States/UTs up to Feb 2022.
- The scheme seamlessly covers nearly 77 Crore beneficiaries (almost 96.8% of NFSA population) in the country.
- Since the inception of the ONORC plan in August 2019, so far more than 65 Crore portability transactions have been recorded in the States/UTs.
 - These transactions have led to delivering nearly 121 LMT foodgrains through both inter-State and intra-State portability transactions equivalent to about Rs. 36,000 Crore in food subsidy.
- As a key indicator, presently a monthly average of about 2.7 Crore portability transactions are being recorded in the States/UTs under ONORC.

- A specially customized Android Mobile App on ONORC is also available in 13 languages.
- Besides, a 5-digit '14445' toll-free number for migrant NFSA beneficiaries is also available in most States/UTs under ONORC.

National Panchayati Raj Day



The Prime Minister visited Jammu & Kashmir to participate in the celebration of National Panchayati Raj Day and addressed all the Gram Sabhas across the country.

- He visited Palli Panchayat in Samba district.

About National Panchayati Raj Day

The Constitution (73rd Amendment) Act, 1992 that came into force with effect from 24th April, 1993 has vested constitutional status on Panchayati Raj institutions.

- This date thus marks a defining moment in the history of decentralization of political power to the grassroots level.
- Accordingly, the Government of India decided in consultation with the States to celebrate 24th April as National Panchayati Raj Day.
 - The National Panchayati Raj Day (NPRD) is being celebrated on 24 April since 2010.
- There are 2.51 lakh Panchayats in our country, which include 2.39 lakh Gram Panchayats, 6904 Block Panchayats and 589 District Panchayats.

- Under the 15th Finance Commission for the period 2021-26, Rs. 2,36,805 Crore has been recommended for rural local bodies (RLBs)/ panchayats.
- Awards Given on Panchayati Raj Day
- During the National Panchayat Raj Day event, the following awards are being given to the best performing Panchayats:
- Deen Dayal Upadhyay Panchayat Sashaktikaran Puraskar (DDUPSP)
- Nanaji Deshmukh Rashtriya Gaurav Gram Sabha Puraskar (NDRGGSP)
- Gram Panchayat Development Plan (GPDP) Award
- Child-friendly Gram Panchayat Award

Note: Palli Panchayat is moving towards becoming the first Carbon Neutral Panchayat in the country.

Kisan Bhagidari, Prathmikta Hamari' campaign

Ministry of Agriculture and Farmers Welfare is organizing the 'Kisan Bhagidari, Prathmikta Hamari' campaign.



- The campaign under 'Azadi Ka Amrit Mahotsav' is in association with various other Ministries & Departments of the Government of India.

Key Points

- Kisan Bhagidari Prathmikta Hamari campaign is being dedicated to strengthen the farming community.
- In this, lakhs of farmers, many MPs and other public representatives and scientists par-

icipated through fairs in 731 Krishi Vigyan Kendras and other agricultural institutions across the country.

- Government of India will also conduct 'Fasal Bima Pathshala' under 'Kisan Bhagidari Prathmikta Campaign'.
 - The Campaign aims to make the farmers aware about key scheme aspects of Pradhan Mantri Fasal Bima Yojana (PMFBY).

'Indian Pharma Vision 2047'



7th International Conference on Pharma and Medical Device Sector was recently organised on the Theme 'Indian Pharma Vision 2047'.

Key Points

The event was organised by Department of Pharmaceuticals under the Ministry of Chemicals and Fertilizers.

- India has the triple advantage of cost, quality and scale in the pharma sector and this needs to be ramped up.
- India is able to fulfill 50 per cent of the demand in many of the low-income economies as well as in the advanced market by supplying good quality generic medicines on a regular basis.
- Enumerating on the vision Pharma 2047, following objectives, vision and roadmap of the Ministry was highlighted:
 - Global leader in manufacturing of affordable, innovative & quality pharmaceuticals.
 - 'Vishwaguru' in innovation & Research for delivering health care products to future generations in a sustainable manner.

- Ensure accessibility & affordability of patient-centric products.
- Contribute to Health System to attain union of equity, efficacy, and efficiency.
- Reduce India's carbon footprint in Pharma-MedTech to align with Hon'ble PMs vision of "Panchamrita"
- Identifying critical suppliers, de-risking & decarbonising the supply chain, and promoting local sourcing
- Digitization and technology upgradation in delivery of services & products under Jan Aushadhi Pariyojana.

Some other Highlights:

- The government is planning to operationalize around 1.5 lakh Ayushman Bharat Health and Wellness centers in the country by December, 2022.
 - Out of which 1.17 lakhs have already been operationalised.
- Under Ayushman Bharat PM-JAY, 10 crore families are provided with health security and cashless treatment of 5 lakhs yearly.
- In addition to this, the Government is working relentlessly to provide digital health service delivery through Ayushman Bharat Digital Mission.
- The government is planning to spend Rs 65,000 crores in the next 5 years till 2025-26 to create health infrastructure at district levels.

Nutrient Based Subsidy (NBS) for Kharif Season



Cabinet has approved Nutrient Based Subsidy (NBS) rates for Phosphatic and Potassic (P&K) fertilizers for Kharif Season.

Key Points

- Subsidy approved by Cabinet for the NBS Kharif-2022 (from 01.04.2022 to 30.09.2022) will be Rs. 60,939.23 Crores.
 - This will include support for indige-

nous fertilizer (SSP) through freight subsidy and additional support for indigenous manufacturing and imports of DAP.

- The increase in the international prices of Di-ammonium phosphate (DAP) and its raw materials have been primarily absorbed by the Union Government.

Background:

Government is making available fertilizers, namely Urea and 25 grades of P&K fertilizers to farmers at subsidized prices through fertilizer manufacturers/importers.

- The subsidy goes to fertiliser companies, although its ultimate beneficiary is the farmer who pays MRPs less than the market-determined rates.
- Companies, until recently, were paid after their bagged material had been dispatched and received at a district's railhead point or approved godown.
- From March 2018, a new so-called direct benefit transfer (DBT) system was introduced.
 - Under this system, subsidy payment to the companies would happen only after actual sales to farmers by retailers.
- Each retailer — there are over 2.3 lakh of them across India — now has a point-of-sale (PoS) machine linked to the Department of Fertilisers' e-Urvarak DBT portal.
- Anybody buying subsidised fertilisers is required to furnish his/her Aadhaar unique identity or Kisan Credit Card number.
- The quantities of the individual fertilisers purchased, along with the buyer's name and biometric authentication, have to be captured on the PoS device.
- Only upon the sale getting registered on the e-Urvarak platform can a company claim subsidy.
- The sale is processed on a weekly basis and payments are remitted electronically to the bank accounts.

Ayushman Bharat - Health and Wellness Centres

Ayushman Bharat-Health and Wellness Centres (AB-HWCs) have crossed a landmark milestone in their mission of providing quality healthcare services near to the communities.

- A record 3.5 lakhs tele-consultations have been registered on two consecutive days- 26th April and 27th April 2022 through flagship telemedicine scheme of Union Health Ministry- "eSanjeevani".



Key Points

- e-Sanjeevani portal has been facilitating access to healthcare services across the length and breadth of the country.
- This has become possible because of 1 Lakh AB-HWCs which are already registered as spokes seeking consultation and more than 25,000 hubs providing teleconsultations.
- The steady rise in tele-consultations to seek quality healthcare is a big step towards Antyodaya.
- eSanjeevani, first-of-its-kind telemedicine initiative by any country has two variants.
- The first being eSanjeevani Ayushman Bharat-Health and Wellness Centre (AB-HWC):
 - A Doctor-to-Doctor telemedicine service under Ayushman Bharat-Health and Wellness Centres scheme of Government of India.
 - Aims to provide general and specialised health services in rural areas and isolated communities.
 - Doctor-to-Doctor telemedicine service is based on a Hub-and-Spoke model.
 - 'eSanjeevani AB-HWC' enables virtual connection between the beneficiary at the spoke i.e. HWC and doctor/specialist at the hub.
 - This facilitates real-time virtual consultation from doctors & specialists.
- The second one being eSanjeevaniOPD:
 - This is a patient-to-doctor telemedicine service to enable people to get outpatient services in the confines of their homes.
 - 'eSanjeevaniOPD' has also been speed-

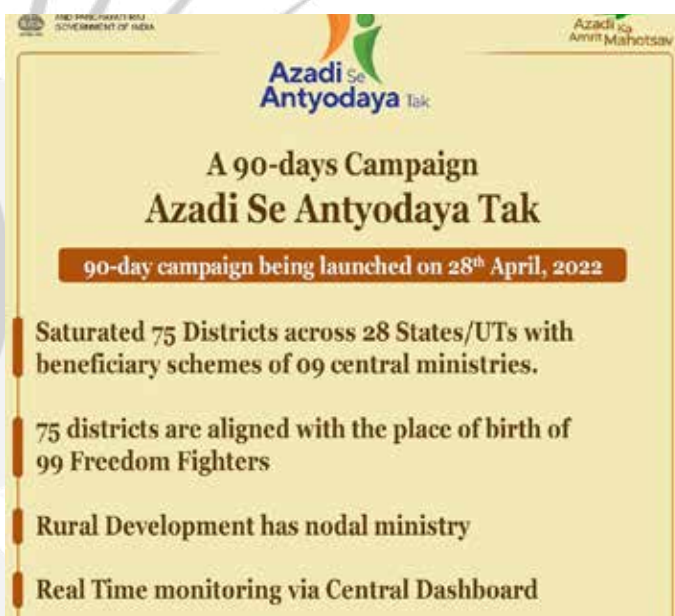
ily and widely adopted by citizens in all parts of the country.

- It is available as a mobile app for both Android and iOS based smartphones, and these apps have seen over 3 million downloads.

90-day campaign 'Azadi Se Antyodaya Tak'

Union Minister for Rural Development & Panchayati launched 'Azadi Se Antyodaya Tak'.

- It is a 90-day campaign with a mission to saturate 75 Districts across 28 States/UTs with beneficiary schemes of 09 central ministries.



Key Points

The identified districts are aligned with the birth place of 99 Freedom Fighters, who made the ultimate sacrifice for the nation during India's struggle for independence.

- The goal of the campaign is to take up 17 select schemes with direct assistance to beneficiaries in saturation mode.
- This will help in reaching out to the person at the bottom of the pyramid in rural areas by each of the participating ministries/departments.
- The 75 districts, marginally lagging behind in the development parameters, have been short-listed through MPCE (Monthly per Capita Indicators) and SECC-2011 data.

Ministry of Tribal Affairs organises workshop on ADIGRAMS

Ministry of Tribal Affairs (MoTA) as part its 'Out-reach Initiative' is connecting with key stakeholders

associated with execution of government schemes at ground level.

- In continuation with this, MoTA organised two-day's hands-on training of key functionaries from across the Jharkhand state on ADIGRAMS (Adivasi Grants Management System).

About ADIGRAMS

ADIVASI GRANTS MANAGEMENT SYSTEM (ADIGRAMS) Portal will provide a central database for Ministry of Tribal Affairs and the State Tribal De-



velopment/ Welfare Department.

- The database can be used to access, interact and analyse up-to-date scheme wise Physical and financial information and progress.
- The portal will enable the officials/stakeholders at Central, State, District, Block and village level to access, monitor and measure performance in a real-time basis and take decisions accordingly.

Atal New India Challenge 2.0

Atal Innovation Mission launched the phase 1 of the 2nd edition of the Atal New India Challenge (ANIC 2.0).

- Atal New India Challenge is a flagship program of Atal Innovation Mission, NITI Aayog.

Key Points

- The program aims to seek, select, support and nurture technology-based innovations that solve sectoral challenges of national importance and societal relevance.
- One of the primary goals of the ANIC program is to support innovations in areas critical to India's development and growth.
 - Areas such as Education, Health, Water and Sanitation, Agriculture, Food

Processing, Housing, Energy, Mobility, Space Application etc.

- The Atal New India Challenge aims to address the Commercialization Valley of Death –
 - That is supporting innovators scale over the risks associated with access to resources for testing, piloting and market creation.
- ANIC solicits innovations from start-ups and MSMEs in the prototype stage.
- After that supports them through to the commercialization stage over a course of 12 – 18 months with a funding of up to INR 1 crore along with other associated support from the AIM's innovation ecosystem.
- The 1st phase of ANIC 2.0 will see 18 challenges being thrown open from 7 sectors:
 - E-mobility
 - Road Transportation (in partnership with Ministry of Road Transport and Highways)
 - Space Technology and Application (in partnership with Department of Space - Indian Space Research Organization)
 - Sanitation Technology (in partnership with Ministry of Social Justice and Empowerment)
 - Medical Devices and Equipment
 - Waste Management
 - Agriculture

Ujjwala diwas on 1st May 2022

To celebrate the achievements of Pradhan Mantri Ujjwala Yojana, Ministry of Petroleum and Natural Gas (MoPNG) has decided to celebrate 1st May 2022 as Ujjwala Diwas.

- Pradhan Mantri Ujjwala Yojana (PMUY) is a major step towards social inclusion by providing Free LPG connection to every BPL household.

Key Points

Oil marketing companies will organise more than 5000 LPG panchayats on the occasion of Ujjwala diwas on 1st may 2022.

- On the occasion, apart from experience sharing, aimed at safe and sustained usage of LPG, all out efforts will be made to maximise customer enrolment.

About Pradhan Mantri Ujjwala Yojana

Pradhan Mantri Ujjwala Yojana is a scheme of the Ministry of Petroleum & Natural Gas for providing LPG connections to women from Below Poverty Line (BPL) households.

- The scheme was launched on 1st May 2016 in Ballia, Uttar Pradesh.
- The target under the scheme was to release 8 Crore LPG Connections to the deprived households by March 2020.
- On 7th September 2019, Hon'ble Prime Minister of India handed over the 8th Crore LPG connection in Aurangabad, Maharashtra.
- Cash assistance for PMUY connections is also provided by Government of India - Rs. 1600 (for a connection 14.2kg cylinder/ Rs. 1150 for a 5 kg cylinder).
- Also, the connection provided by the Oil Marketing Companies (OMCs) will be deposit free.

About Ujjwala 2.0

- In the Union budget for FY 21-22, provision for an additional one crore LPG connection under the PMUY scheme was announced.
- These one crore additional PMUY connections (under Ujjwala 2.0) aim to provide deposit-free LPG connections-
 - To those low-income families who could not be covered under the earlier phase of PMUY.
- Along with a deposit free LPG connection, Ujjwala 2.0 will provide first refill and hot-plate free of cost to the beneficiaries.
- In Ujjwala 2.0, migrants will not be required to submit ration cards or address proof.
- A self-declaration for both 'family declaration' and as a 'proof of address' will suffice.

Surplus Overall Grain Availability in the country

India has a comfortable food situation with an overall



surplus availability of grains and stocks expected to be higher than the minimum requirement for the next one year.

Key Points

- On April 1, 2023, India would have stocks of 80 LMT of wheat, well above the minimum

requirement of 75 LMT.

- Rice procurement last year was about 600 LMT and this year same figure is expected.
- Our annual requirement for NFSA is roughly about 350 LMT. So, we are in a surplus situation for rice also.
- From next year, fortified rice will be distributed to the entire Public Distribution System (PDS).
-

Conference of Cluster-Based Business Organizations (CBBOs)

Conference of Cluster-Based Business Organizations (CBBOs) and Farmer Producer Organizations (FPOs) was recently organised under the Scheme of Formation and Promotion of 10,000 FPOs.

- The Scheme is a central sector scheme lunched by Ministry of Agriculture & Farmers Welfare (MoA&FW).

Key Points

Government of India formulated a Central Sector Scheme (CSS) viz., "Formation and Promotion of Farmer Producer Organizations (FPOs)".

- It aimed for formation and promotion of 10,000 FPOs over a period of 5 years i.e., by 2023-24.
- National Bank for Agriculture and Rural Development (NABARD) and National Cooperative Development Corporation (NCDC) are among the Implementing Agencies.
- NABARD and NCDC together will promote about 6000 FPOs during the 5 years and about 600 each during 2020-21.
- Cluster Based Business Organizations (CBBOs) will be set up at the State/Cluster level by NABARD / NCDC to form and promote FPOs.
- A CBBO has professional experience and exposure in formation of FPOs in agriculture and allied sectors, and providing handholding support to the FPOs.
- NABARD and NCDC intend to jointly empanel the CBBOs for promotion of FPOs.
- NCDC will promote FPOs which will be registered under Cooperative Societies Acts of respective States.
- NABARD will promote FPOs which can be registered under any Statute such as Companies Act, Cooperatives Societies Act, Trust Act, etc.

About NABARD

- Reserve Bank of India (RBI) at the insistence of the Government of India, constituted a Committee to Review the Arrangements for Institutional Credit for Agriculture and Rural Development.
- The Committee was formed on 30 March 1979, under the Chairmanship of Shri B. Sivaraman, former member of Planning Commission.
- The Committee's interim report, submitted on 28 November 1979.
- It outlined the need for a new organisational device for providing undivided attention, forceful direction and pointed focus to credit related issues linked with rural development.
- Thus, formation of National Bank for Agriculture and Rural Development (NABARD) was approved by the Parliament through Act 61 of 1981.
- NABARD came into existence on 12 July 1982 by transferring:
 - the agricultural credit functions of RBI and
 - refinance functions of the then Agricultural Refinance and Development Corporation (ARDC).
- It was set up with an initial capital of Rs.100 crore.
- Its' paid up capital stood at Rs.14, 080 crore as on 31 March 2020.
- NABARD today is fully owned by Government of India under the jurisdiction of Ministry of Finance.

Go Kasht machine for Project Arth

Union Minister for Fisheries, Animal Husbandry and Dairying handed over cow dung log machine, called as "Go Kasht" to Project Arth.

- Cow dung log machine is used to manufacture cow dung-based fuel wood in long log-like shape.



Key Points

- A mixture of cow dung and cattle waste (like dried waste paddy) is inserted in the inlet (hopper) of this machine.
- The machine then breaks it down, mixes it, and compresses the mixture in the shape of a log.
- This log is then sun dried and can be later used as a fuel wood in various situations.
- This machine can process 3000 kg of cow dung every day to produce 1500 kg of cow dung-based logs that can be used as firewood for the cremation of 5-7 bodies, saving roughly 2 trees in each cremation.
- That further means it can help the gaushala to clear roughly 150,000 to 170,000 kg of cow dung every month.
- Using cow dung-based log machine can help gaushala to cater to their waste management problems,
 - And also provide an additional source of employment to its employees or nearby villagers, and contribute in reducing deforestation.
- It also helps to engage the non-milking cows in an economic activity, generating funds to support all the cows in a gaushala.

About Project Arth

- The conventional way of wood based cremations causes large scale deforestation and air pollution in the cities of India.
- Project Arth targets to replace wood as a fuel, with modified cow-dung logs for conducting the Hindu practice of cremations in the crematoriums of India.
- In India, around 50 million trees are cut every year to supply wood logs as a fuel for traditional Hindu cremations.
- Arth took up the initiative to redefine this ritual -by providing an alternative to wood logs that has religious alignment and does not generate comparable emissions on burning.

Grievance Redressal In Case Of All Ride-Hailing Companies

The Department of Consumer Affairs has directed all ride-hailing companies to become convergence partner in the National Consumer Helpline.

- This is to enable better grievance redressal for consumers and also compliance with Consumer Protection Act, 2019 and E-commerce Rules, 2020.

Key Points

The meeting was attended by major ride hailing platforms including Ola, Uber, Rapido, Meru Cabs and Jugnoo.

- All online ride-hailing platforms were advised to respond to the concerns of commuters with utmost priority and take remedial steps.

Grievances Highlighted?

The major grievances highlighted during the meeting were:

- Deficiency in service
 - Lack of proper response from customer support
 - Pre-ticked boxes including add-on services
 - Driver refusing to take payment by on-line mode and insisting for cash only.
 - Higher amount charged despite going on the same route previously at a lesser charge
 - Unprofessional driver behaviour
 - Driver refusing to switch on AC when the consumer is promised AC ride on the app.
- Inaccessible customer support
 - No customer care number is provided on the platform.
 - No details of grievance officer is mentioned
 - Automated pre-written support message is given to consumers without redressing the grievance.
- Unreasonable levy of cancellation charges
 - User is not shown the amount of time within which cancelling a ride is permitted.
 - Cancellation Charges are variable and inconsistent.
 - Drivers, not willing to take the ride and forcing users to cancel the ride, which entails undue cancellation charges.
- Fairness of the algorithms that calculates the charges for the user
 - If it is learnt that in case someone is using the OTA services consistently for going from point A to point B, the charges for him may be higher than somebody who is using it between the same two locations for the first time.
 - Users are not shown the algorithm or

method used by the company to charge different fares for the same route from two individuals.

- Due to this, users are forced to take rides at arbitrary fares which are much higher than what is charged ordinarily for the same route

Karnataka sets 2027 target to become malaria-free

Karnataka has set a target to eliminate malaria by 2027, three years before the 2030 target set by the Union government.

- Karnataka has received national recognition and appreciation for its efforts to eliminate malaria in the past six years.
- These efforts to eradicate malaria are a part of the National Framework for Malaria Elimination in India (NFMEI) initiative.

About National Framework for Malaria Elimination in India (NFMEI)

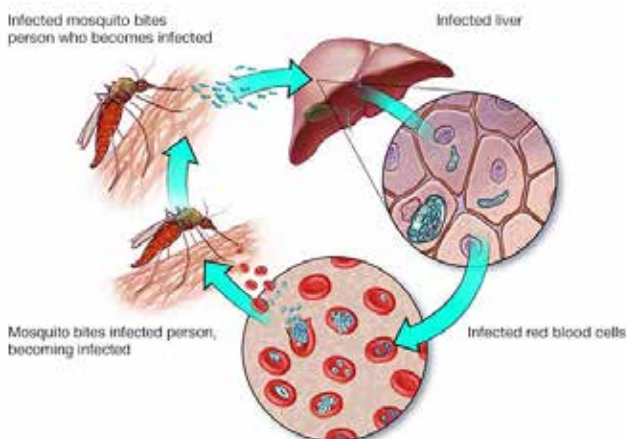
- The National Framework for Malaria Elimination (NFME) 2016-2030 outlines India's strategy for elimination of the disease by 2030.
- The framework has been developed with a vision to eliminate malaria from the country and contribute to improved health and quality of life and alleviation of poverty.
- The NFME document clearly defines goals, objectives, strategies, targets and timelines and will serve as a roadmap for advocating and planning malaria elimination.
- Goals:
 - Eliminate malaria (zero indigenous cases) throughout the entire country by 2030; and
 - Maintain malaria-free status in areas where malaria transmission has been interrupted and prevent re-introduction of malaria.
- Objectives:
 - Eliminate malaria from all low (Category 1) and moderate (Category 2) endemic states/UTs (26) by 2022
 - Reduce incidence of malaria to less than 1 case per 1000 population in all States/UTs and the districts and malaria elimination in 31 states/UTs by 2024

- Interrupt indigenous transmission of malaria in all States/ UTs (Category 3) by 2027.
- Prevent re-establishment of local transmission of malaria in areas where it has been eliminated and to maintain malaria-free status of the country by 2030.

Note: India has a vision of being a malaria-free country by 2027 and eliminating by 2030.

About Malaria

- Malaria is a life-threatening disease caused by parasites that are transmitted to people through the bites of infected female Anopheles mosquitoes.
- Malaria is an acute febrile illness caused by Plasmodium parasites, which are spread to people through the bites of infected female Anopheles mosquitoes.
- It is preventable and curable.
- In 2020, there were an estimated 241 million cases of malaria worldwide.
- The estimated number of malaria deaths stood at 627 000 in 2020.
- The WHO African Region carries a disproportionately high share of the global malaria burden.
- In 2020, the region was home to 95% of malaria cases and 96% of malaria deaths.
- Children under 5 accounted for about 80% of all malaria deaths in the Region.
- Four African countries accounted for just over half of all malaria deaths worldwide:
 - Nigeria (31.9%), the Democratic Republic of the Congo (13.2%), United Republic of Tanzania (4.1%) and Mozambique (3.8%).



International Nurses Day

International Nurses Day is celebrated around the world every May 12, the anniversary of Florence Nightingale's birth.



- International Council of Nurses (ICN) commemorates this important day each year with the production and distribution of the International Nurses' Day (IND) resources and evidence.
- The theme for the 2022 resource is Nurses: A Voice to Lead - Invest in Nursing and respect rights to secure global health.

About ICN

International Council of Nurses (ICN) aims to represent nursing worldwide, advance the nursing profession, promote the wellbeing of nurses, and advocate for health in all policies.

About Florence Nightingale

Florence Nightingale was an English social reformer, statistician and the founder of modern nursing.

- Nightingale was put in charge of nursing British and allied soldiers in Turkey during the Crimean War.
- She was popularly known as 'Lady with the Lamp'.

Enhanced Scales of Accommodation - 2022 for the Armed Forces

Defence Ministry has approved revised Scales of Accommodation 2022 (SoA) for Defence Services on.

This will ensure contemporary specifications in future projects and better standards of living for the personnel of the Armed Forces.

Key Points

- The implementation of Scales of Accommodation – 2022, would lead to tremendous improvement in built facilities/ infrastructure and specifications commensurate to contemporary requirements.
- Optimisation of Defence land usage by using multi-storeyed construction and austerity measures by combining of common facilities have been emphasized.
- These would ensure better working and living conditions for the Defence personnel including Defence civilians.
- Amenities in all public buildings for persons with disabilities have been introduced and gender commonality in all specifications has been ensured.
- The Scales of Accommodation (SoA) defines the authorization for construction facilities for operational, functional, training, administrative, living and recreation facilities for the Defence Services.



- These Scales are applicable for all the three Defence Services and the Indian Coast Guard.
- The previous SoA was approved by the Government in Oct 2009.
- The enhanced Scales will also be in line with the Government vision and programmes like Swachh Bharat, Sugamya Bharat, Digital India, Green Buildings, etc.

Breed-Wise Report of Livestock and Poultry Based on 20th Livestock Census



Union Ministry of Fisheries, Animal Husbandry and Dairying released the Breed-Wise Report of Livestock and Poultry based on 20th Livestock Census.

- The breed-wise data collection was done along with 20th Livestock Census during the year 2019.

Key Points

- It was for the first time in the country that breed wise data was collected by using tablet computers instead of paper mode.
- The livestock as well as poultry birds were counted according to their breeds as recognized by National Bureau of Animal Genetic Resources (NBAGR).

Major Highlights of the Report

- The report has covered 184 recognized indigenous/exotic & crossbred breeds of 19 selected species that are registered by the NBAGR.
- There are 41 recognized indigenous whereas 4 exotic/crossbred breeds of cattle covered in this report.
- As per the report, the Exotic and Crossbred animal contribute nearly 26.5% of the total cattle population whereas 73.5% are Indigenous and Non-descript cattle.
 - Crossbred Jersey has the highest share with 49.3% as compared to 39.3% of Crossbred Holstein Friesian (HF) in total Exotic/Crossbred cattle.
 - Gir, Lakhimi and Sahiwal breeds have major contribution in total Indigenous Cattle.
- In Buffalo, the Murrah breed majorly contributes with 42.8% which is commonly found in UP and Rajasthan.
- In Sheep, there are 3 exotics and 26 indige-

nous breeds were found in the country.

- Among the pure exotic breeds, Corriedale breed majorly contributes with 17.3% and in the indigenous breeds the Nellore breed contribute the highest in the category with 20.0% share.
- In Goats, there are 28 indigenous breeds found in the country.
 - The Black Bengal breed contributes the highest with 18.6%.
- In Camel, Bikaneri breed majorly contributes with 29.6%.
- In Donkeys, the share of Spiti breed contributes with 8.3%.
- In Horse & Ponies, the share of Marwari breed majorly contributes with 9.8%.
- In exotic/crossbred pigs, crossbred pig contributes 86.6% whereas Yorkshire contributes majorly with 8.4%.
 - In indigenous pigs, Doom breed majorly contributes with 3.9%.
- In Poultry, desi fowl, Aseel breed majorly contribute in both backyard poultry and commercial poultry farm.

reduce water consumption at source considerably.

NITI Aayog Launches the National Data & Analytics Platform

NITI Aayog launched the National Data & Analytics Platform (NDAP) for open public use today.



- The platform aims to democratize access to public government data by making data accessible, interoperable, interactive, and available on a user-friendly platform.

Key Points

- NDAP hosts foundational datasets from various government agencies, presents them coherently, and provides tools for analytics and visualization.
- This public launch follows a beta release of the platform in August 2021 that had provided access to a limited number of users for testing and feedback.
- NDAP follows a use-case based approach to ensure that the datasets hosted on the platform are tailored to the needs of data users from government, academia, journalism, civil society, and the private sector.
- All datasets are standardized to a common schema, which makes it easy to merge datasets and do cross-sectoral analysis.
- The main value that NDAP adds is making key foundational datasets interoperable with each other.
 - This will enable easy cross-sectoral analysis and democratize the use of Indian government data.
- NDAP is a critical milestone – which aims to aid India's progress by promoting data-driven disclosure, decision making and ensuring availability of data connecting till the last mile.

'BHARAT TAP' initiative

Ministry of Housing and Urban Affairs & Petroleum and Natural Gas launched the BHARAT TAP initiative at the 'Plumbex India' exhibition.



- This exhibition is aimed for products and services related to the plumbing, water and sanitation industry.

Key Points

- Plumbing industry is capitalising on the business opportunity while also playing a significant role in supporting the development of sanitation and other basic services in the country.
- BHARAT TAP initiative will provide low-flow, sanitary-ware at scale, and thereby

“GatiShakti Sanchar” Portal

Department of Telecommunication (DoT) recently launched “GatiShakti Sanchar” Portal for Centralised Right of Way (RoW) approvals.

- This will help in universal and equitable access to Broadband services across the country in line with the National Broadband Mission (NBM).

About National Broadband Mission (NBM)

- National Broadband Mission (NBM) was set up by the Department of Telecommunication (DoT) in December 2019.
- Objective: to facilitate universal and equitable access to broadband services across the country, especially in rural and remote areas.
- The “National Broadband Mission” or “Rashtriya Broadband Abhiyan” aims to operationalize “Broadband for All”, the objective of National Digital Communications Policy – 2018 (NDCP-18).
- NBM also aims:
 - to bridge the digital divide in the country,
 - fast track growth of digital communications infrastructure,
 - facilitate digital empowerment & inclusion and
 - provide affordable, universal access to broadband to all.

- NBM has been structured to rely on the following three principles which are also the intrinsic features of broadband services:
 - Universality: Ubiquitous availability of broadband services to bridge the digital divide
 - Affordability: Availability of affordable broadband services to every citizen of India to bridge the socio-economic divide
 - Quality: Availability of high speed and highly reliable broadband access to all.
- Objectives under the policy:
 - Broadband access to all villages in the country by 2022.
 - High-speed broadband connectivity in the country.
 - Increase route length of Optical Fiber Cable (OFC) in the country to 50 lakh km.
 - Increase the density of telecom towers in the country.
 - Connect at least 70% of the telecom towers in the country with fibre.
 - Strengthen existing 4G infrastructure and facilitate 5G deployment in the country.

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Raisina Dialogue 2022

The Prime Minister attended the inaugural session of Raisina Dialogue 2022 where President of the European Commission, H.E. Ms. Ursula Von Der Leyen delivered the keynote address.

About Raisina Dialogue

The Raisina Dialogue is India's premier conference on geopolitics and geoeconomics committed to addressing the most challenging issues facing the global community.

- Every year, leaders in politics, business, media, and civil society converge in New Delhi to discuss the state of the world and explore opportunities for cooperation.
- The Dialogue is structured as a multi-stakeholder, cross-sectoral discussion, involving heads of state, cabinet ministers and local government officials, who are joined by thought leaders from the private sector, media and academia.
- The conference is hosted by the Observer Research Foundation in partnership with the Ministry of External Affairs, Government of India.
- The Raisina Dialogue 2022 will be modelled along six thematic pillars.
 - Rethinking Democracy: Trade, Tech and Ideology
 - End of Multilateralism: A Networked Global Order
 - Water Caucuses: Turbulent Tides in the Indo-Pacific
 - Communities Inc: First Responders to Health, Development, & Planet
 - Achieving Green Transitions: Common Imperative, Diverging Realities
 - Samson vs Goliath: The Persistent and Relentless Tech War



India and Maldives to establish transmission interconnection

Two Memoranda of understanding (MoUs) were signed between India and Maldives – one on Energy cooperation and another on transmission interconnection under One Sun, One World, One Grid (OS-OWOG).

Key Points

To facilitate Maldives' energy transition programme, India and Maldives have proposed to establish transmission interconnection for renewable power transfer as part of One Sun, One World & One Grid initiative.

- Maldives has pledged to achieve the net zero emission target by 2030.

6th India-Germany Inter-Governmental Consultations (IGC)

India and Germany signed nine agreements during the 6th IGC which will give a new direction to bilateral relations between both countries.

- Both nations have signed the Joint Declaration of intent in multiple fields including foreign affairs, economics, financial policy, scientific exchange, and sustainable development among other things.

Key Points

The list of the agreements is as follows:

- Green and Sustainable Development Partnership
- Triangular Development Cooperation wherein India and Germany will cooperate together in third country projects.
- Migration and Mobility Partnership Agreement.
- Indo-German Development Cooperation Regarding Renewable Energy Partnership.
- the continuation of cooperation in the field of advanced training of corporate executives and junior executives from India
- Indo-German Green Hydrogen Task Force
- Joint Declaration of intent in Forest Landscape Restoration
- Joint Declaration of intent on Agroecology

2nd India-Nordic Summit

Prime Minister of India participated in the 2nd India-Nordic Summit along with Prime Ministers of Denmark, Iceland, Sweden and Finland.



- The Summit provided an opportunity to review the progress of the India-Nordic relations since the 1st India-Nordic Summit, which was held in 2018 in Stockholm.

About Nordic Countries

The Nordic Region consists of Denmark, Norway, Sweden, Finland, and Iceland, as well as the Faroe Islands, Greenland, and Åland.

- The countries are in a specific geographical and cultural region of Northern Europe and the North Atlantic called the Nordic region.
- The Scandinavian term for the Nordic region is Norden.
- Denmark is the smallest of the five nations in the Nordic Region and is the most densely populated country in the region.
 - It has a constitutional monarchy.
 - Country's capital: Copenhagen.
 - Denmark is the official sovereign state that presides of Greenland and the Faroes Islands, although both of these states have a high degree of autonomy.
 - Denmark is a member of the EU, but has retained the krone as its currency.
 - It is also a member of NATO.
 - The most important sources of revenue in Denmark are oil and other forms of energy, the medical industry, agricultural produce, shipping and IT services.
- Finland is called "the land of a thousand lakes" as inland lakes and rivers make up 10% of the country.
 - Finland has land borders with its Nordic neighbours Norway and Sweden.
 - Finland also has a land border with Russia and sea borders with Estonia and Åland.
 - Finland is a republic.
- Capital: Helsinki
- Finland is a member of the EU and uses the euro as its currency.
- It is not a member of NATO.
- The forestry, technology and metal industries are Finland's most important sources of income.
- Iceland is a republic, located on an island just south of the Arctic Circle.
 - Iceland doesn't share any borders with other countries, and its nearest neighbours are Greenland, Norway and the United Kingdom.
 - Iceland is a republic with a directly elected president.
 - Capital: Reykjavik
 - Iceland is not an EU member, but it is a signatory to the EEA Agreement, so is part of the European Economic Area.
 - Iceland is a member of NATO.
 - Fish and fishery products are still the country's main source of income, followed by aluminium and ferrosilicon exports.
- Norway is a country of mountain ranges, huge forests, vast empty expanses and only about 3% arable land.
 - Norway is a constitutional monarchy.
 - Capital: Oslo
 - Although not in the EU, Norway is part of the European Economic Area and a member of NATO.
 - The biggest source of national income is the extraction and export of offshore oil and gas.
- Sweden shares land borders with Norway in the west and Finland in the northeast.
 - Sweden is a constitutional monarchy.
 - Capital: Stockholm
 - Sweden is a member of the EU, but has retained the krona as its currency.
 - It is not a member of NATO.
 - Sweden has the biggest population in the Nordic Region at 10.3 million.
- The Faroe Islands – 18 islands of various sizes connected by tunnels and ferries – is one of three autonomous territories in the Nordic Region.
 - The Faroe Islands are part of the Kingdom of Denmark but have extensive home rule.
- Greenland is part of the Kingdom of Denmark but has wide-ranging autonomy.
 - Greenland has been populated for 5,000 years, by people from Arctic region and Europe.
 - Although part of the North American

continent, geopolitically the island is part of Europe.

- Greenland is not a member of the EU.
- Åland consists of 6,757 islands situated mid-way between Sweden and Finland.
 - Although Åland is part of Finland, Ålanders speak Swedish.
 - Although Åland is part of the Republic of Finland, it has its own autonomous parliament.
 - Åland is a demilitarised and neutral zone.
 - Åland is a member of the EU and its currency is the euro, but Åland's relationship with the EU is regulated by way of a special protocol.

Falklands Dispute

“The Commission for Dialogue” with the United Kingdom on the Falkland Islands was recently inaugurated by India and Argentina.



- The commission seeks to settle the territorial dispute over the Islas Malvinas that are known as the Falkland Islands in the UK.

Background

- The British, in 1765, were the first to settle West Falkland, but they were driven off in 1770 by the Spanish.
- The British outpost on West Falkland was restored in 1771 after threat of war, but then the British withdrew from the island in 1774 for economic reasons, without renouncing their claim to the Falklands.
- Spain maintained a settlement on East Falkland (which it called Soledad Island) until 1811.
- In 1820 the Argentina Government, which had declared its independence from Spain in 1816, proclaimed its sovereignty over the Falklands.
- However, in 1841, a British civilian lieutenant governor was appointed for the Falklands.
- In February 1982, Argentina's military government invaded the Falklands.

- This act started the Falkland Islands War.

- The war ended with the surrender of the Argentine forces at Stanley to British troops who had forcibly reoccupied the islands.
- In a referendum held in March 2013, islanders voted nearly unanimously to remain a British overseas territory.
- Despite wars and discussions at the United Nations, the issue of sovereignty remains a point of contention.

About Falkland Islands

Falkland Islands are an overseas territory of the United Kingdom located to the southwest Atlantic Ocean at the southernmost point of South America.

- Positioned both in the southern and western hemispheres of the Earth.
- They are also called Malvinas Islands.
- The archipelago, with an area of 4,700 square miles (12,000 square kilometres), comprises East Falkland, West Falkland, and 776 smaller islands.
- The capital and largest settlement is Stanley on East Falkland.

India elected as Chair of the Association of Asian Election Authorities

India has been unanimously elected as the new Chair of the Association of Asian Election Authorities (AAEA) for 2022-2024.



- The decision was taken at the recently held meeting of the Executive Board and General Assembly in Manila, Philippines.

Key Points

- Commission on Elections, Manila was the current chair of AAEA.
- In India, India International Institute for Democracy and Election Management (II-IDEM) has been regularly conducting International Training Programmes.
 - These training programmes are attended by the officials from many

AAEA member countries.

- Further, IIIDEM also conducts customized capacity development training programs for specific AAEA member countries.
- Since 2019, more than 250 officials from AAEA member countries have attended these programmes.
- During 2021–22, Bangladesh Election Commission's 50 officials were trained in the programme.
- Delegates from AAEA have also been regularly participating in the International Election Visitors Programme organised by Election Commission of India.

About AAEA

- The Association of Asian Election Authorities (AAEA) was established in 1998.
- This was in pursuance of the resolution passed by participants of the Symposium on Asian Elections in the 21st Century in Manila, Philippines.
- The new member of the Executive Board now includes Russia, Uzbekistan, Sri Lanka, Maldives, Taiwan, and the Philippines.
- The Election Commission of India (ECI) is a founder member of the Election Management Body (EMB) of the AAEA.
- Currently, 20 Asian EMBs are members of AAEA.
- The Association of Asian Election Authorities aims to provide a non-partisan forum in the Asian region for sharing experiences and best practices among election authorities.

MISSION SAGAR IX

As part of on-going deployment of Indian Naval Ship Gharial in South West Indian Ocean, under Mission SAGAR IX, INS GHARIAL has been deployed to Seychelles.



About Mission SAGAR

- Launched in May 2020, 'Mission Sagar' was India's initiative to deliver Covid-19 related assistance to the countries in the Indian Ocean Littoral states.
- The countries included were Maldives, Mauritius, Madagascar, Comoros and Seychelles.
- Under 'Mission Sagar', the Indian Navy has been deploying its ships to send medical and humanitarian aid to the countries in the Indian Ocean Region (IOR) and beyond.
- Since May 2020, the Indian Navy has successfully concluded eight such missions, deploying ten ships to 18 Friendly Foreign Countries.
- Under the mission, the Indian Navy has delivered assistance of more than 3,000 metric tons of food aid, over 300 metric tons of liquid medical oxygen, 900 oxygen concentrators and 20 ISO containers to 15 friendly foreign countries.

About Seychelles

- The Seychelles consist of an archipelago of about 100 islands in the Indian Ocean north-east of Madagascar.
- The principal islands are Mahé, Praslin, and La Digue. The Aldabra, Farquhar, and Desroches groups are included in the territory of the republic.
- Ethnicity/race: Mixed including French, African, Indian, Chinese, and Arab.
- Languages: Seychellois Creole (official) 89.1%, English (official) 5.1%, French (official) 0.7%, other 3.8%, unspecified 1.4% (2010 est.)



Defence Minister inaugurates DefConnect 2.0

Raksha Mantri launched Innovations for Defence Excellence (iDEX) Prime and sixth Defence India Start-up Challenge (DISC 6) during DefConnect 2.0.



- DefConnect will provide a unique opportunity for defence innovators associated with iDEX-DIO to showcase their capabilities, products and state-of-the-art-technologies to the target audience of the industry leaders.

Key Points

- The iDEX-Prime aims to support projects, requiring support beyond Rs 1.5 crore up to Rs 10 crore, to help ever-growing start-ups in the defence sector.
- Further, the platform will provide iDEX start-ups display their innovative technologies being developed indigenously.
- The Defence Minister also launched Defence India Start-up Challenge (DISC 6) with 38 Problem Statements.
- Aimed at finding solutions in new-age era, the Problem Statements relate to Artificial Intelligence (AI), Advanced Imaging, Sensor Systems, Big Data Analytics and Autonomous Unmanned Systems and Secured Communication among others.

About iDEX

Innovations for Defence Excellence (iDEX) is a game-changer in the Defence eco-system.

- It works with the objective of fostering innovation and incorporating cutting-edge and disruptive technologies in the Indian Armed Forces in a quick time frame.
- The iDEX scheme, since its inception in 2018, has been achieving self-reliance and indigeni-

sation in the defence ecosystem.

- iDEX will be funded and managed by a “Defence Innovation Organisation (DIO)”.⁸

About DefConnect 2.0

- DefConnect 2.0 was organised by Innovations for Defence Excellence, Defence Innovation Organisation (iDEX-DIO).
- It is an event to bring together start-ups, big companies and armed forces personnel to boost indigenous innovation in the defence sector.

Defence Acquisition Procedure 2020 amended

Defence Acquisition Procedure (DAP) 2020 has been amended based on the approvals accorded by Defence Acquisition Council (DAC).

- This has been done to further promote ‘Make in India’ and ‘Aatmanirbharta’ in defence and enable Ease of Doing Business.

Key Points

The amendments have been made in respect of the following:

- Going forward all modernisation requirements of the Defence Services and Indian Coast Guard are to be indigenously sourced.
 - This has to be ensured irrespective of the nature of procurement.
- Import of defence equipment/sourcing from Foreign Industry of capital acquisitions should only be an exception and undertaken with specific approval of DAC/Raksha Mantri.
- To reduce financial burden on the Indian Defence Industry whilst maintaining financial safeguards, requirement of Integrity Pact Bank Guarantee (IPBG) has been dispensed with.
 - Instead, Earnest Money Deposit (EMD) will be taken as a bid security for all acquisition cases with Acceptance of Necessity (AoN) cost more than Rs 100 crore.
 - Further, as per extant Government of India policy, EMD is not required from Micro and Small Enterprises (MSEs).
- To encourage wider participation and broad

base indigenous defence manufacturing sector in the country, the total order quantities in acquisition cases are to be split between short-listed vendors, wherever viable.

- Further, the other technically qualified bidders who have not been awarded contract will be issued a certificate by the Services.
 - The certificate will indicate that the product has been successfully trial evaluated, to facilitate vendors to explore other markets.

About Defence Acquisition Council (DAC)

The Defence Acquisition Council is the highest decision-making body in the Defence Ministry for deciding on new policies and capital acquisitions.

- The Defence Minister acts as the Chairman of the Council.
- The council was setup after the recommendations made by the Group of Ministers on Reforming the National Security System in February 2001.
- Members:
 - Raksha Rajya Mantris (RRMs)
 - Chief of Defence Staff (CDS)
 - Chief of Army Staff (COAS)
 - Chief of Naval Staff (CNS)
 - Chief of Air Staff (CAS)
 - Defence Secretary
 - Secretary Dept. of Defence Production and Supplies
 - Secretary, Defence Research and Development
 - Secretary, Defence Finance
 - Vice Chief of Defence Staff (when appointed)/CISC
 - Special Secretary (Acquisition)

National Intelligence Grid (NATGRID)

Union Minister for Home and Cooperation recently inaugurated the National Intelligence Grid (NATGRID) Bengaluru premises.

- The NATGRID CEO informed that the services of NATGRID solution will be available to 11 central agencies and police of all States and Union Territories.

About NATGRID

NATGRID is aimed at providing cutting-edge technology to boost India's counter-terror capabilities.

- NATGRID is conceptualised as a seamless and secure database for information on terrorists, economic crimes and similar incidents to help bolster India's capabilities.
- It will work as a robust mechanism to track

suspects and prevent terrorist attacks with real-time data.

- The 26/11 terrorist siege in Mumbai back in 2008 exposed the deficiency that security agencies had no mechanism to look for vital information on a real-time basis.

NATGRID Working

- In the first phase, 10 user agencies and 21 service providers will be connected with the NATGRID.
- In later phases about 950 additional organisations will be brought on board.
- NATGRID database will be available to prominent federal agencies including Central Bureau of Investigation (CBI), Enforcement Directorate (ED), Central Board of Direct Taxes (for Income Tax Department) (CBDT), and Intelligence Bureau (IB) among others.

Note: The Cabinet Committee on Security (CCS) had given approval to the ₹3,400 crore NATGRID project back in 2010 but its work slowed down after 2012. The current government revived the project.

CAPF Punarvaas

Ministry of Home Affairs under the directions of the Union Home Minister has launched 'CAPF Punarvaas', through the Welfare & Rehabilitation Board (WARB).

- Aim is to facilitate retired Central Armed Police Force (CAPF) and Assam Rifle personnel to secure employment with private security agencies.

Key Points

The portal will help retired personnel seeking re-employment to find an appropriate match by uploading their personal details on the WARB website along with their area of expertise and preferred employment location.

- The Ministry of Home Affairs also runs a portal under Private Security Agencies Regulation Act (PSARA) for the registration of Private Security Agencies (PSAs).
- Both websites have now been interlinked whereby the database of retired CAPFs personnel who have applied on 'CAPF Punarvaas' can be accessed by PSAs.

About Central Armed Police Force (CAPF)

The Central Armed Police Forces (CAPF) refers to the body of seven security forces in India under the Ministry of Home Affairs authorization. These seven forces are:

- Assam Rifles (AR)
- Border Security Force (BSF)

- Central Industrial Security Force (CISF)
- Central Reserve Police Force (CRPF)
- Indo Tibetan Border Police (ITBP)
- National Security Guard (NSG)
- Sashastra Seema Bal (SSB)

Arunachal Pradesh – Assam border dispute

Arunachal Pradesh Chief Minister and his Assam counterpart have decided to form district-level committees for settling their inter-state boundary disputes.

- Recently, the Union government gave the seal of approval to an agreement to resolve the disputed sectors on the Assam-Meghalaya border.

Background

- Assam has had boundary disputes with all the north-eastern States that were carved out of it.
- Arunachal Pradesh and Mizoram were separated from Assam as Union Territories in 1972 and as States in 1987.
- None of the new States accepted the “constitutional boundary” that they said was dictated by the partisan administration of undivided Assam without consulting the tribal stakeholders.
- The issue with Arunachal Pradesh has more to do with a 1951 report prepared by a sub-committee headed by Assam’s first Chief Minister, Gopinath Bordoloi.

Key Points

- Arunachal Pradesh and Assam have disputes at about 1,200 points along their 804 km boundary.
- The apex court appointed a local boundary commission in 2006 headed by one of its retired judges.
- In its September 2014 report, this commission recommended that Arunachal Pradesh should get back some of the areas transferred in 1951 besides advising both the States to find a middle path through discussions.
- This resolution did not work out.



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PM receives Lata Deenanath Mangeshkar Award

The Prime Minister, Shri Narendra Modi attended the Master Deenanath Mangeshkar Awards Ceremony in Mumbai.

- On this occasion, Prime Minister was conferred 1st Lata Deenanath Mangeshkar Award.
- This award, which has been instituted in memory of Bharat Ratna Lata Mangeshkar, will be given every year exclusively to one individual for exemplary contribution towards nation building.

Note: Late Lata Mangeshkar Ji left the mortal world on 6th Feb, 2022. In 2001, in recognition of her contributions to the nation, she was awarded the Bharat Ratna, India's highest civilian honour.

- She is only the second female singer, after M. S. Subbulakshmi, to receive this honour.



President of European Commission calls on the President

Her Excellency Ursula Von der Leyen, the President of European Commission called on the President of India, Shri Ram Nath Kovind at Rashtrapati Bhavan.

About European Commission

The European Commission is the EU's politically independent executive arm.

- It is alone responsible for drawing up proposals for new European legislation, and it implements the decisions of the European Parliament and the Council of the EU.
- Role: Promotes the general interest of the EU by proposing and enforcing legislation as well as by implementing policies and the EU budget
- Members: A team or 'College' of Commissioners, 1 from each EU country.
 - Political leadership is provided by a team of 27 Commissioners (one from each EU country).
- President: Ursula von der Leyen
- Year established: 1958
- Location: Brussels (Belgium)



Suman Bery as NITI Aayog Vice Chairman

NITI Aayog welcomed Shri Suman Bery as NITI Aayog's Vice Chairman with effect from May 1 2022.

- An experienced policy economist and research administrator, Mr Bery will take over from Dr Rajiv Kumar as the head of the premier think tank of the Government of India.

Key Points

- Mr Bery has previously served as Director General (Chief Executive) of the National Council of Applied Economic Research (NCAER).
- He was also the global Chief Economist of Royal Dutch Shell.
- He was also a member of the Prime Minister's Economic Advisory Council, Statistical Commission and the Reserve Bank of India's Technical Advisory Committee on Monetary Policy.
- Prior to NCAER, Mr Bery was with the World Bank in Washington DC and his areas included macroeconomy, financial markets and public debt management with a focus on Latin America.

61st Annual conference of Bodo Sahitya Sabha

The President of India graced the 61st annual conference of Bodo Sahitya Sabha at Tamulpur, Assam.



- Bodo people also remembered Bodofa Upendra Nath Brahma on May 1 which is his death anniversary.

About Bodofa Upendra Nath Brahma

- Upendra Nath Brahma was a Bodo Social Activist and a student leader of the All Bodo Student Union (ABSU).
- He spearheaded the 'non-violent Bodoland Movement' to carve out a separate state 'Bodoland' from the Assam.
- He popularized the slogan "Live and Let Live".
- His death anniversary is observed as 'Bodofa Day' all over Assam.

GO 111 order

Environmentalists and activists are criticising the Telangana government for withdrawing GO 111 order.



- They say this will destroy the fragile surrounding ecosystem of the the Osman Sagar and Himayat Sagar lakes.

What is GO 111 order?

- The GO 111 order, issued by the government of erstwhile (undivided) Andhra Pradesh on March 8, 1996.
- It prohibited the setting up of industries, residential colonies, hotels, etc in the catchment area of the Osman Sagar and Himayat Sagar lakes up to a radius of 10.
- The reservoirs were created by building dams on the Musi (also known as Moosa or Muchkunda) river, a major tributary of the Krishna, to protect Hyderabad from floods.
- The lakes came into being during the reign of the last nizam, Osman Ali Khan (1911-48).

Kuril Island

Japan's Diplomatic Bluebook for 2022 has described the Kuril Islands as being under Russia's "illegal occupation".

- This is the first time in about two decades that Japan has used this phrase to describe the dispute over the Kuril Islands.

About the Dispute

- According to Tokyo, Japan's sovereignty over the islands is confirmed by several treaties like:
 - the Shimoda Treaty of 1855,
 - the 1875 Treaty for the exchange of Sakhalin for the Kuril Islands (Treaty of St. Petersburg), and
 - the Portsmouth Treaty of 1905 signed after the Russo-Japanese war of 1904-05 which Japan had won.
- Russia, on the other hand, claims the Yalta Agreement (1945) and the Potsdam Declaration (1945) as proof of its sovereignty.
 - It argues that the San Francisco Treaty of 1951 is legal evidence that Japan had acknowledged Russian sovereign

About Kuril Islands



- These are a set of four islands situated between the Sea of Okhotsk and the Pacific Ocean near the north of Japan's northernmost prefecture, Hokkaido.
- There are 56 islands and many minor rocks and are a volcanic archipelago.

35 million years old rare snake fossil

Scientists have reported spotting of the fossil of a Madtsoiidae snake from the molasse deposits of Ladakh Himalaya.

- Such a discovery indicates their prevalence in the subcontinent for much longer time than previously thought.

Key Points

- Madtsoiidae is an extinct group of medium-sized to gigantic snakes, firstly appeared during the late Cretaceous.
- They are mostly distributed in the Gondwanan landmasses, although, their Cenozoic record is extremely scarce.
- From the fossil record, the whole group disappeared in the mid-Paleogene across most Gondwanan continents.
 - Except for Australia where it survived with its last known taxon Wonambi till late Pleistocene.
- The occurrence of Madtsoiidae from the Oligocene of Ladakh indicates their continuity at least to the end of the Paleogene
- The global climatic shifts and the prominent biotic reorganization across the Eocene-Oligocene boundary, did not cause the extinction of this important group of snakes in India.

About Geological Time Scale

- The geologic time scale is the "calendar" for events in Earth history.
- The vast expanse of geological time has been separated into eras, periods, and epochs.
- The enumeration of those geologic time units is based on stratigraphy, which is the correlation and classification of rock strata.
- The fossil forms that occur in the rocks, however, provide the chief means of establishing a geologic time scale.
- The table presented below is based on the nomenclature set up by International Commission on Stratigraphy (ICS).

Geological Time Scale

Era	Period	Epoch	Age/ Years Before Present	Life/ Major Events	
Cenozoic (From 65 million years to the present times)	Quaternary	Holocene	0 - 10,000	Modern Man	
		Pleistocene	10,000 - 2 million	Homo Sapiens	
	Tertiary	Pliocene	2 - 5 million	Early Human Ancestor	
		Miocene	5 - 24 million	Age: Flowering Plants and Trees	
		Oligocene Eocene Paleocene	24 - 37 million 37 - 56 Million 57 - 65 million	Anthropoid Ape Rabbits and Hare Small Mammals : Rats - Mice	
Mesozoic 65 - 245 Million	Cretaceous Jurassic Triassic		65 - 144 Million 144 - 208 Million 208 - 245 Million	Extinction of Dinosaur Age of Dinosaurs Frogs and turtles	
		Paleozoic 245 - 570 Million	Permian Carboniferous	245 - 286 Million 286 - 360 Million	Reptile contrast-replace amphibians First Reptiles: Vertebrates: Coal beds Amphibians
				Devonian Silurian Ordovician Cambrian	360 - 408 Million 408 - 438 Million 438 - 505 Million 505 - 570 Million
Proterozoic Archean	Pre-Cambrian		570 - 2,500 Million 2,500 - 3,800 Million	Soft-bodied arthropods Blue green Algae: Tricellular bacteria	
		Hadean		3,800 - 4,800 Million	Oceans and Continents form - Ocean and Atmosphere are rich in Carbon dioxide
Origin of Stars Supernova Big Bang			5,000 Million 13,700 Million	Origin of the sun	
			12,000 Million 13,700 Million	Origin of the universe	



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