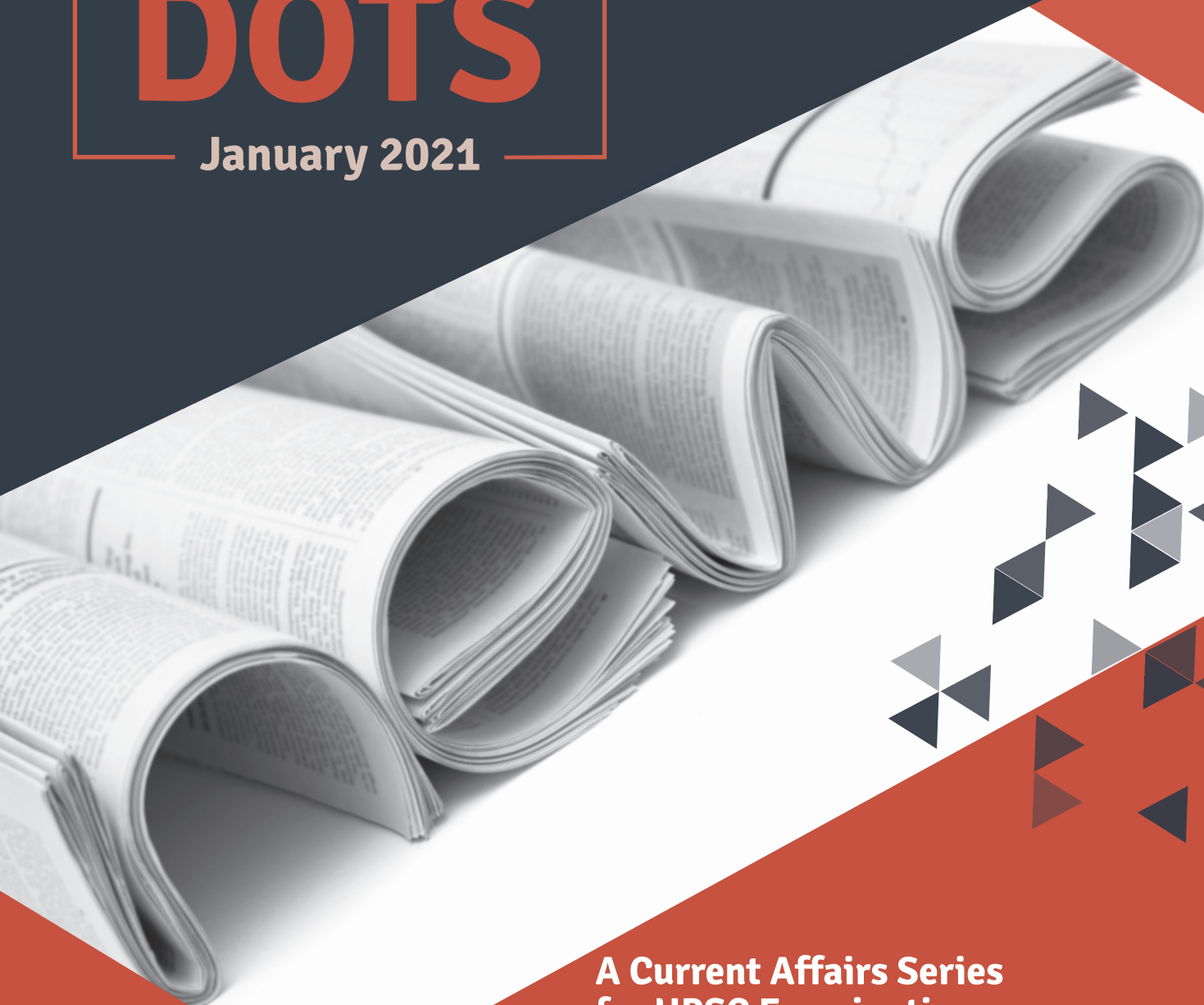


JOIN THE DOTS

January 2021



A Current Affairs Series for UPSC Examination

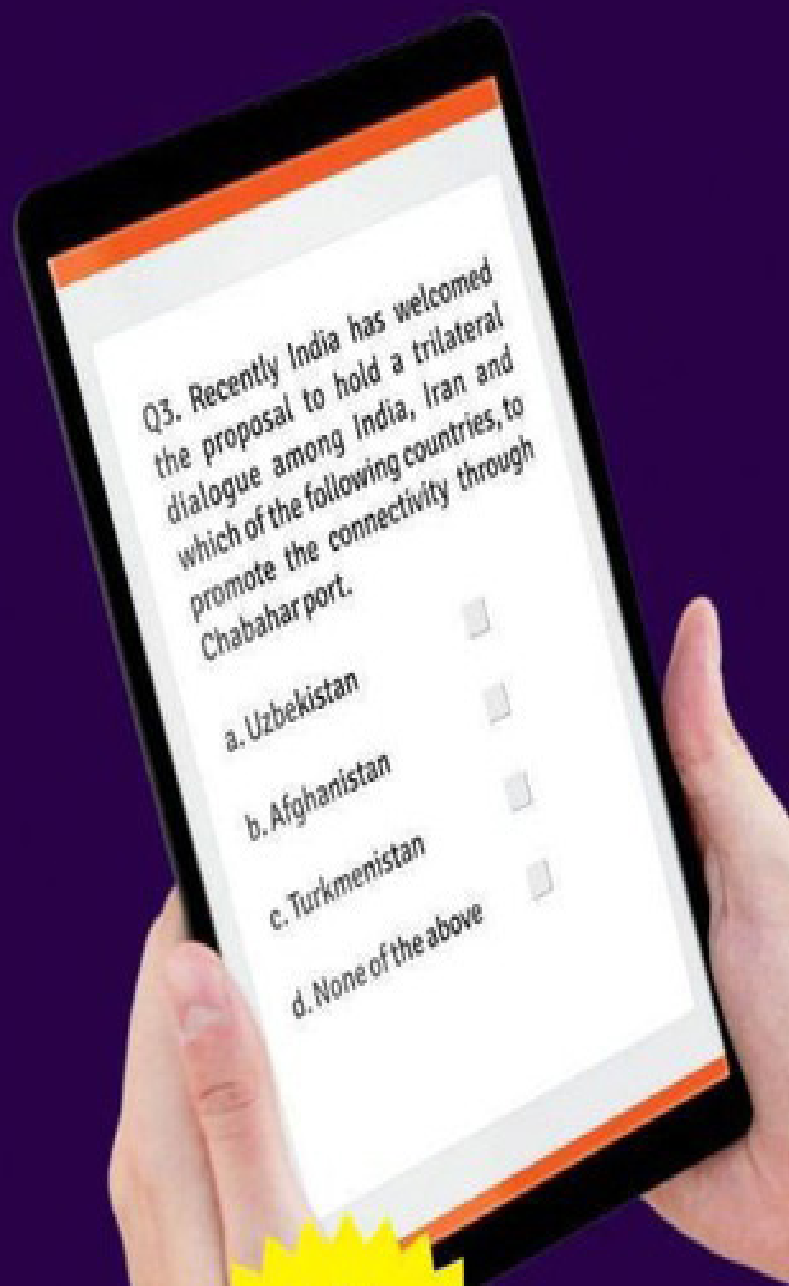
- National Atomic Timescale and Bhartiya Nirdeshak Dravya Pranali to the Nation
- Longitudinal Ageing Study of India (LASI)
- The Special 301 Report
- Prarambh: Startup India International Summit
- India Innovation Index
- Indian SARS-CoV-2 Genomic Consortia (INSACOG) Launched
- India Launches the 40th Scientific Expedition to Antarctica

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Compendium – January 2021

Dear Students,

With the present examination pattern of UPSC Civil Services Examination, General Studies papers require a lot of specialization with 'Current Affairs'. Moreover, following the recent trend of UPSC, almost all the questions are based on news as well as issues. CL IAS has now come up with '**JOIN THE DOTS! JANUARY 2021**' series which will help you pick up relevant news items of the day from various national dailies such as The Hindu, Indian Express, Business Standard, LiveMint, PIB and other important sources.

'**JOIN THE DOTS! JANUARY 2021**' series will be helpful for prelims as well as Mains Examination. We are covering every issue in a holistic manner and covered every dimension with detailed facts. This edition covers all important issues that were in news in the month of June 2019. Also, we have introduced Prelim base question for Test Your Knowledge which shall guide you for better revision. In addition, it would benefit all those who are preparing for other competitive examinations.

We have prepared this series of documents after some rigorous deliberations with Toppers and also with aspirants who have wide experience of preparations in the Civil Services Examination.

For more information and more knowledge, you can go to our website

<https://www.careerlauncher.com/upsc/>

"Set your goals high, and don't stop till you get there"

All the best!!

Team CL

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Prelims Perspicuous Pointers

Join the dots!

A current affairs series for UPSC Examination

Economic Development: IFSCA becomes member of IOSCO

Relevance IN – Prelims (about IOSCO + IFSCA)

What's the NEWS

- The International Financial Services Centres Authority (IFSCA) has become an Associate Member of the International Organization of Securities Commissions (IOSCO).

Know! about IOSCO

- The IOSCO is the international organization that brings together the world's securities regulators, covering more than 95% of the world's securities markets, and is the global standard setter for the securities sector.
- IOSCO works closely with the G20 and the Financial Stability Board (FSB) in setting up the standards for strengthening the securities markets.
- The IOSCO Objectives and Principles of Securities Regulation have been endorsed by FSB as one of the key standards for sound financial systems.
- The membership of IOSCO would provide IFSCA the platform to exchange information at the global level and regional level on areas of common interests
- the IOSCO platform would enable IFSCA to learn from the experiences and best practices of the regulators of other well established financial centres.
- The IOSCO's membership is a significant milestone in connecting IFSCA with the regulators of securities markets globally and would contribute immensely towards the development and regulation of the financial products, financial services and financial institutions at the Gujarat International Finance Tec-City International Financial Services Centre.

Defence: Laser Dazzlers

Relevance IN – Prelims (about Laser Dazzlers)

What's the NEWS

- Bharat Electronics Limited (BEL) has signed a contract with Indian Navy for initially supply 20 Light Amplification by Stimulated Emission of Radiation Dazzlers (Laser Dazzlers)
- The BEL had earlier this month won the contract beating global Original Equipment Manufacturers (OEMs) in buy global category. These would be manufactured by BEL, Pune plant.

Laser Dazzlers

- The Laser Dazzler is used as a non-lethal method for warning and stopping suspicious vehicles/boats/aircrafts/UAVs/pirates etc. from approaching secured areas during both day and night.
- It is capable of dazzle and thereby suppress the person's/optical sensor's action with disability glare in case of non-compliance to orders. It disorient/ confuse/blind a person temporarily.
- It also dazzles and distract aircraft/UAVs. It is a portable, shoulder operated and ruggedized for military use in adverse environmental conditions. Laser dazzler technology was developed by Defence Research and Development Organisation (DRDO).
- This unique product is indigenously designed and developed for first time for the Armed Forces.

Prelims Factoids: National Police K-9 Journal

Relevance IN – Prelims (about National Police K-9 Journal)

What's the NEWS

- The Union Home Minister released the inaugural issue of the National Police K-9 Journal

- It is the first such publication in the country on the subject of Police Service K9s (PSKs) i.e. Police Dogs.

Know! more about it

- This is a unique initiative that will further enrich the subjects related to Police Service Dog (K-9) (PSK) teams in the country
- The police dog squad can act as a force multiplier to ensure the safety of society, much like the way drones or satellites are being used in the country
- A special 'Police K9 Cell' was established in November 2019 under the Police Modernization Division of the Ministry of Home Affairs with the mandate of 'Mainstreaming and Augmentation of Police Service K9s in the country'.
- The publication of the Police K9 Journal is another step in creating an ecosystem in the country to train and learn on augmenting this vital resource.
- The journal comprises of different section in Hindi and English. Apart from Force personnel, few foreign experts of eminence have also contributed their articles in the inaugural issue.
- It is a biannual journal which will be released in April and October every year.



Health Sector: Subject Expert Committee of CDSCO

Relevance IN – Prelims (about the Subject Expert Committee of CDSCO and its role)

What's the NEWS

- The Subject Expert Committee of CDSCO met on 1st and 2nd January, 2021 and made the following recommendations for the consideration and final decision of the Drugs Controller General of India :-
 1. Grant of permission for restricted emergency use of vaccine, subject to multiple regulatory conditionalities, to M/s Serum Institute of India, Pune.
 2. Grant of permission for restricted use in emergency situation in public interest as an abundant precaution, in clinical trial mode, specially in the context of infection by mutant strains, to M/s Bharat Biotech International Ltd., Hyderabad.
 3. Grant of permission for conduct of Phase-III Clinical Trial Protocol to M/s Cadila Healthcare Ltd, Ahmedabad.

Know! all about CDSCO and Subject Expert Committee (SEC)

- The Central Drugs Standard Control Organization (CDSCO) plays an important role in safeguarding and enhancing public health by ensuring the quality, safety, and efficacy of drugs, cosmetics, and medical devices.
- It is the Central Drug Authority for fulfilling functions allocated to the Central Government under the Drugs and Cosmetics Act.
- CDSCO also plays a vital role in taking care of health services such as making committees of eligible members to review clinical trials in various scopes of practice such as ophthalmology, cardiology, pediatrics, psychiatry, and many more.
- The Ministry of Health and Family Welfare of the Government of India, through CDSCO, endorses 25 panels of experts from various therapeutic areas that come together to evaluate various categories of applications of clinical trials, new drugs, and medical devices.
- Experts are selected and approved by the government from various therapeutic fields of medicine all over the country.
- SEC is one such committee formed by CDSCO. SEC comprises of 8 experts, whose names are drawn from the 25 panels; 7 of the 8 members need to be medical specialists whereas 1 has to be a pharmacologist.
- These experts need to be priorly approved by the Ministry of Health and Family Welfare.
- The experts are expected to make essential statements and give advice to Drug Controller General of India (DCGI) on the upcoming clinical trials, drugs, and medical devices.

Prelims factoids: Cabinet approves Opening of 3 Indian Missions in Estonia, Paraguay and Dominican Republic

Relevance in – Prelims (about the three Indian Missions opened- location) + Mains (GS II International relations)

What's the NEWS

- The Union Cabinet chaired by Prime Minister approved the opening of 3 Indian Missions in Estonia, Paraguay and Dominican Republic in 2021.

Know! the importance and benefits of these missions

- Opening of Indian Missions in these countries will help expand India's diplomatic footprint, deepen political relations, enable growth of bilateral trade, investment and economic engagements, facilitate stronger people-to-people contacts, bolster political outreach in multilateral fora and help garner support for India's foreign policy objectives.
- Indian mission in these countries will also better assist the Indian community and protect their interests.
- The objective of India's foreign policy is to build a conducive environment for India's growth and development through partnerships with friendly countries.
- There are presently Missions and Posts across the world which serve as conduits of our relations with partner countries.

Science and Technology: National Atomic Timescale and Bhartiya Nirdeshak Dravya

Relevance IN – Prelims (about National Metrology Conclave 2021 + Bhartiya Nirdeshak Dravya Pranali + CSIR-NPL National Atomic Timescale)

What's the NEWS

- The Prime Minister delivered inaugural address at the National Metrology Conclave 2021.
- The National Metrology Conclave 2021 is being organised by Council of Scientific and Industrial Research-National Physical Laboratory (CSIR-NPL), New Delhi, which is entering into its 75th year of inception.
- He dedicated National Atomic Timescale and Bhartiya Nirdeshak Dravya Pranali to the Nation and laid the Foundation Stone of National Environmental Standards Laboratory
- The theme of the conclave is 'Metrology for the Inclusive Growth of the Nation'.

CSIR-National Physical Laboratory

- CSIR-National Physical Laboratory, India (NPLI) ensures the quality of products in every manufacturing and consumer sector by providing SI traceable measurements and enhancing quality life of citizens through metrology.

myGov मेरी सरकार

PM Modi to deliver Inaugural Address at

NATIONAL METROLOGY CONCLAVE

on 4th January

- PM Narendra Modi will deliver the inaugural address at the **75th National Metrology Conclave on 4th Jan 2021**
- He will also dedicate **National Atomic Timescale & Bhartiya Nirdeshak Dravya** to the nation
- National Atomic Timescale generates IST with an accuracy of 2.8 nanoseconds & Bhartiya Nirdeshak Dravya supports testing & calibration of labs for quality assurance
- PM to also lay Foundation Stone of **National Environmental Standards Laboratory**
- The Lab will aid self-reliance in the certification of ambient air & industrial emission monitoring equipment

- Reference materials (RM) play pivotal role in maintaining the quality infrastructure of any economy through testing and calibration with precise measurements traceable to SI units.
- NPLI has recently released two very important certified RMs as Bharatiya Nirdeshak Dravyas (BNDs) i.e BND[®]-4201 for 4N purity gold and BND[®]-5101A for Bituminous coal.
- NPLI has started Certified Indian Reference Material program around 1986 and more than 31 certified reference materials are already in the market.
- Recently, the Govt of India (GoI) has supported NPLI to strengthen its BND[®] program by developing BNDs in the area of AYUSH, Materials, Nanotechnology, Medicine, Food & Agriculture and Biologics.
- The availability SI traceable BNDs[®] are poised to boost “Make in India” program and harmonize the quality infrastructure of the country.

Bhartiya Nirdeshak Dravya

- Bhartiya Nirdeshak Dravya is supporting testing and calibration of laboratories for quality assurance, at par with international standards.
- The National Environmental Standards Laboratory will aid self-reliance in the certification of ambient air and industrial emission monitoring equipment.
- Bhartiya Nirdeshak Dravya would help the industry to make quality products in sectors like Heavy metals, Pesticides, Pharma and Textiles by drafting a ‘Certified Reference Material System’.

CSIR-NPL National Atomic Timescale

- India has become self-reliant in measuring the time within the range of a nano second.
- The National Atomic Timescale generates Indian Standard Time with an accuracy of 2.8 nanoseconds.
- Achieving the accuracy level of 2.8 Nano Second is a huge capability in itself.
- Now Indian Standard Time is matching the International Standard Time with the accuracy range of less than 3 nano second.
- This will be a big help for organization like ISRO who are working with cutting edge technology.
- Modern technology related Banking, railways, defense, health, telecom, weather forecast, disaster management and many similar sectors will be benefited greatly from this achievement.

Miscellaneous: Kamdhenu Gau-Vigyan Prachar-Prasar Exam

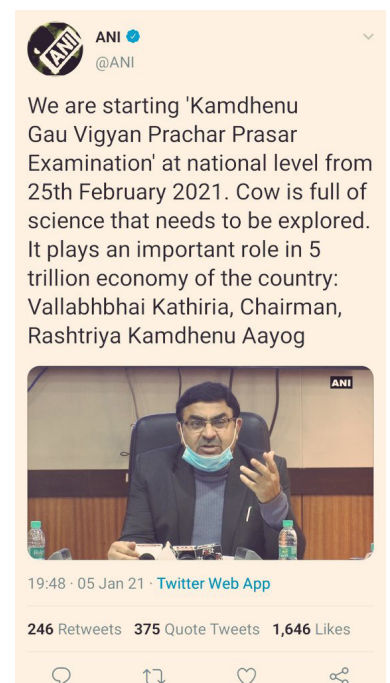
*Relevance IN – Prelims (about RKA + about **Kamdhenu Chair + Vigyan Prachar-Prasar Examination**)*

What’s the NEWS

- For raising mass awareness about Indigenous Cows among young Students and every other citizen, RASTRIYA KAMDHENU AAYOG(RKA) has come out with a noble initiative of making Study materials about Cow Science available and conduct “**Kamdhenu Gau-Vigyan Prachar-Prasar Examination**”.
- This will infuse the curiosity into all Indians about the cows, and make them aware of the unexplored potential and business opportunities a cow can offer, even after it stops giving milk.
- Earlier this month **Kamdhenu Chair or Kamdhenu Study Centre or Kamdhenu Research Centre** in all colleges and universities across the country has been established

KamdhenuGau-Vigyan Prachar-Prasar Exam

- It will be an online exam to be conducted throughout the country on 25th February, 2021.
- The KamdhenuGau-VigyanPrachar-Prasar Exam will be of 100 marks and one-hour duration in Hindi, English and 12 regional languages.
- There is no fee for the examination. The examination will be tick-mark objective type question-answers (MCQ).



- The syllabus as well as other literature and reference books on cows, which will be recommended on the website of the RashtriyaKamdhenuAayog, will help the examinees prepare for the exam.
- TheKamdhenuGau-VigyanPrachar-Prasar Exam will be an annual event of the RashtriyaKamdhenuAayog in future.

RashtriyaKamdhenuAayog (RKA)

- RKA has been constituted by the Government of India for the conservation, preservation, protection and development of cows and their progenies and for giving directions for the cattle development programmes.
- **RKA is a high-powered permanent body to formulate** policies and to provide directions for the implementation of schemes related to cattle so as to lay more emphasis on livelihood generation for small & marginal farmers, women and youth entrepreneurs.

Miscellaneous: Toycathon-2021



Relevance IN – Prelims (about Toycathon)

What's the NEWS

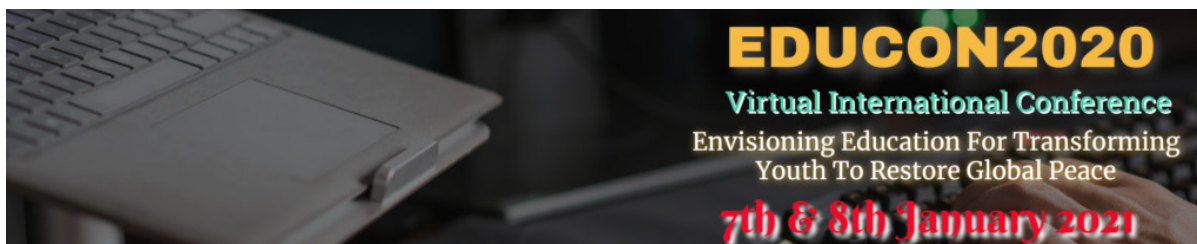
- Union Minister for Women & Child Development and Textiles Minister jointly launched the Toycathon 2021
- Ministry of Education, Ministry of Women and Child Development (MWCD), Ministry of Textile, Ministry of Commerce and Industries, Ministry of MSME, Ministry of I&B and All India Council for Technical Education (AICTE) have jointly launched Toycathon-2021.

Know! all about the Toycathon

- This is a special kind of hackathon where students and teachers from schools and colleges, design experts, toy experts and startups will get together to crowd source ideas for developing toys and games that are based on Indian culture and ethos, local folklore and heroes, and Indian value systems.
- This will greatly help India develop into a global hub for toys and games, it will also help our children to understand the ethos and values of Indian culture as envisaged in the National Education Policy 2020.
- The Toycathon is **based on nine themes** viz. Indian Culture, History, Knowledge of India and Ethos; Learning, Education and Schooling; Social and human values; Occupations & specific fields; Environment; Divyang ; Fitness and sport; Out of the box, creative and logical thinking and Rediscovering/redesigning traditional Indian toys.
- The Toycathon will have **3 variants of tracks** of Junior Level, Senior Level and Start up Level and will allow participation of students and teachers from schools, colleges and universities apart from startups and toy experts.
- Participants will have two options for idea submission; they can either submit ideas for the published problem statements or under novel toy concepts category.

- This Toycathon is aimed to conceptualize innovative toys based on the Indian value system which will inculcate the positive behaviour and good value among the children.
- India imports 80 per cent of toys and the government is working towards promoting the indigenous toy industry for making the country self-reliant in this sector.
- The collaboration with Ministry of Education paves the way for the participation of students, faculties from all schools, colleges and universities of the country with regards to needs of the MSME industry in our country.
- This is the first time when school children will innovate, design and conceptualize toys also for specially abled 'divyang children'.

Education: EDUCON-2020



Relevance IN – Prelims (about EDUCON 2020 – objective and highlights)

What's the NEWS

- Union Education Minister inaugurated the two-day Virtual International Akhand Conference 'EDUCON 2020'
- This two-day International Conference is being organized by Central University of Punjab, Bathinda (CUPB) in collaboration with the Global Educational Research Association (GERA)
- The focal theme of EDUCON-2020 is Envisioning Education for Transforming Youth to Restore Global Peace.

EDUCON-2020

- In this International Conference, scholars from United Kingdom, Canada, Thailand, USA, Australia, Bhutan and India would be continuously discussing on the ten subthemes of the focal theme 'Envisioning Education for Transforming Youth to Realize Global Peace' for 31 hours.
- This conference is the first of its kind in India where scholars across the world would be continuously having a non-stop marathon dialogue sessions for 31 hours exploring the possibilities of the use of ICT in the higher education to promote the equitable quality education in India.
- Further, the conference will also provide a platform for discussions on emerging trends in education viz., likely scenario of higher education and school education by 2050, developing disruptive technologies for STEAM (Science, Technology, Engineering, Arts and Mathematics) Education, training youth for strategic future jobs in Universities, skill training programme for future graduates and relevance of ancient education system in 21st century.

Know! about GERA

- It is a not-for-profit, non-governmental organization committed to supporting students and young professionals in their pursuit of excellence in academia, industry, and the arts by providing specialized life-mapping services.
- Through the use of mentor-based programs, GERA is committed to build a new generation of entrepreneurial and academic leaders – young men and women possessed of the training and confidence necessary for building a better tomorrow.

GERA's six pillars are:

1. Promotion of Literacy and Academics
2. Advancement of Research and Knowledge
3. Encouragement of Entrepreneurship and Innovation
4. Talent Discovery and Development
5. Enhancing Multicultural Acceptance
6. General Student Support

- GERA currently has 24 unique and innovative programs to offer its members and has partnered with leading companies and organizations to help in its cause.
- GERA focuses its attention on a wide range of interconnected issues such as drop-out rate reduction and financial literacy, serving as liaison between international students and educational institutions.

Economy: RBI sets up College of Supervisors under former deputy governor to strengthen supervision

Relevance IN – Prelims (about College of Supervisors (CoS))

What's the NEWS

- The Reserve Bank of India (RBI) is now fully operationalising a College of Supervisors (CoS) to further strengthen supervision over regulated entities.
- The Cos will be headed by former deputy governor N S Viswanathan and will have five other members.

College of Supervisors (CoS)

- The RBI had set up a CoS to augment and reinforce supervisory skills among its regulatory and supervisory staff both at entry level and on a continuous basis.
- This was done to facilitate the development of unified and focused supervision by providing training and other developmental inputs to the concerned staff
- The CoS was functioning in a limited way in virtual mode since May 2020, it is now being fully operationalised.
- The CoS will have a full-time Director supported by an Academic Advisory Council (AAC).
- The AAC will identify areas where skill building/up-skilling are required, plan and develop curricula of all programmes, benchmark the programmes with international standards/best practices, develop appropriate teaching methods, etc.
- Rabi Narayan Mishra, former Executive Director, RBI, has been appointed as the Director of CoS.
- The full-fledged operationalisation of the CoS will further contribute to effective oversight of the regulated entities by augmenting and ensuring a consistent quality of supervisory resources pool

Social Issues: World food price index

Relevance IN – Prelims (about world food price index – take outs + about FAO)

What's the NEWS

- World food prices rose for a seventh consecutive month in December, with all the major categories, barring sugar, posting gains last month
- The Food and Agriculture Organization's food price index, which measures monthly changes for a basket of cereals, oilseeds, dairy products, meat and sugar, averaged 107.5 points last month versus 105.2 in November.
- It was introduced in 1996 as a public good to help in monitoring developments in the global agricultural commodity markets.
- The FAO Food Price Index (FFPI) is a measure of the monthly change in international prices of a basket of food commodities.

Know! the Index Highlights

- For the whole of 2020, the benchmark index averaged 97.9 points, a three-year high and a 3.1 percent increase from 2019.
- It was still down more than 25 percent from its historical peak in 2011.
- Supply tightness in major palm oil producing countries had pushed prices up, while trade was also impacted by a sharp hike in export duties in Indonesia.
- Export prices for wheat, maize, sorghum and rice all rose in December, moving higher in part due to concerns over growing conditions and crop prospects in North and South America as well as Russia
- The meat index pushed up 1.7 percent last month, while its full-year average was 4.5 percent below that of 2019. FAO said poultry quotations rebounded in December, partly due to the impact of avian influenza outbreaks in Europe.

- Bucking the rises in other indices, average sugar prices dipped by 0.6 percent in December.
- FAO did not issue an updated forecast for worldwide cereal harvests in January. Its next estimate is due in February.
- Last month, FAO revised down its forecast for the 2020 cereal season for a third month running, cutting it to 2.742 billion tonnes from a previous 2.75 billion tonnes.

Food and Agriculture Organization:

- The Food and Agriculture Organization of the United Nations is a specialized agency of the United Nations that leads international efforts to defeat hunger and improve nutrition and food security.
- FAO is a specialized agency of the United Nations that leads international efforts to defeat hunger.
- World Food Day is celebrated every year around the world on 16th October. The day is celebrated to mark the anniversary of the founding of the FAO in 1945.
- It is one of the UN food aid organisations based in Rome (Italy). Its sister bodies are the World Food Programme and the International Fund for Agricultural Development (IFAD).

Prelims Factoids: National Youth Parliament Festival

Relevance IN – Prelims (about National Youth Parliament Festival)

What's the NEWS

- Prime Minister will address the valedictory function of the second National Youth Parliament Festival on 12th January 2021

National Youth Parliament Festival

- The objective of National Youth Parliament Festival is to hear the voice of youth between 18 and less than 25 years of age, who will join various careers in coming years, including public services.
- National Youth Parliament Festival (NYPF) is based on the idea given by Prime Minister in his Mann Ki Baat Address on 31st December 2017.
- Taking inspiration from the idea of Prime Minister, the first NYPF 2019 was organised from 12 January to 27 February 2019 at District, State & National level with the theme “Be the Voice of New India and Find solutions and Contribute to Policy”.

2nd National Youth Parliament Festival 2021

- In order to continue with the same spirit and objective, with enhanced enthusiasm, the 2nd National Youth Parliament Festival 2021 was launched on 23rd December 2020 through virtual mode which was witnessed by more than 23 Lac youth and stakeholders across the country at district, state and national level.
- The Finals of National Youth Parliament Festival, 2021 will be held in the Central Hall of the Parliament on 11th January, 2021. 84 winners from States/ Union Territories will get an opportunity to be present in the Central Hall of Parliament before the Lok Sabha Speaker; Deputy Chairman of Rajya Sabha along with Minister (IC), Ministry of Youth Affairs and Sports and other dignitaries.

The poster is for the National Youth Parliament Festival 2019. At the top left is a portrait of Prime Minister Narendra Modi with a quote: "Democracy is a festival. It is a festival of creating our own future and the youth are at the very centre of creating India's future." Below this is the text "BE THE VOICE OF NEW INDIA" and "FIND SOLUTIONS & CONTRIBUTE TO POLICY". The central text reads "Prime Minister Narendra Modi's clarion call for youth-led development". A large yellow circle contains the participation details: "Participate in District, State, National Youth Parliament (12th January - 24th February 2019)", "BEGIN WITH DISTRICT YOUTH PARLIAMENT", "Log on to: myGov.in (12th - 18th January 2019)", and "OR Walk into the designated centre for an Audition (17th - 19th January 2019)". At the bottom, it says "Be heard. Make a difference." and lists the websites: www.nss.gov.in, www.yas.nic.in, and Innovate.mygov.in/youth-parliament. Logos for the Ministry of Youth Affairs and Sports and NYKS are also present.

National Youth Festival

- National Youth Festival is celebrated every year from 12th to 16th January. 12th January being the birth anniversary of Swami Vivekananda, is observed as National Youth Day.
- This year, NYPF is also being organized along with the National Youth Festival.
- The objective of the National Youth Festival is to bring youth of the country together to showcase their talents; provide them an arena, by creating a mini-India, where youth interact in formal and informal settings and exchange their social and cultural uniqueness.
- It is also to promote national integration, spirit of communal harmony, brotherhood, courage and adventure.
- The basic aim is to propagate the spirit, essence and concept of Ek Bharat Shreshtha Bharat.
- 'YUVAAH – Utsah Naye Bharat Ka' is the theme of this year's festival, which suggests, the youth bring alive the celebration of New India.
- The opening ceremony of the 24th National Youth Festival and the closing ceremony of 2nd National Youth Parliament Festival will both take place on 12th January, 2021 in the Central Hall of Parliament.

Youth Parliaments will be conducted at three levels:

- District Youth Parliament (DYP) will be conducted at the district level. Preliminary rounds of screening will be conducted to select youth for participation in the DYP. The youth will be selected through two screening processes i.e. digital & walk-in
- State Youth Parliament (SYP): The youth selected by a Jury from the District Youth Parliament will participate at the State level in SYP.
- National Youth Parliament (NYP): The youth selected by a Jury from the State Youth Parliament will participate at the National level in NYP.

Know! about NYKS

- Nehru Yuva Kendras were established in the year 1972 with the objective of providing rural youth avenues to take part in the process of nation building as well providing opportunities for the development of their personality and skills.
- In the year 1987-88, Nehru Yuva Kendra Sangathan (NYKS) was set up as an autonomous organization under the Government of India, Ministry of Youth Affairs and Sports, to oversee working of these Kendras.
- NYKS is the largest grassroots level youth organization; one of its kind in the world. It channelizes the power of youth on the principles of voluntarism, self-help and community participation.
- Nehru Yuva Kendra Sangathan has established a network of youth clubs in villages, where Nehru Yuva Kendras have been set up.
- NYKS has targeted to identify areas of harnessing youth power for development by forming Youth Clubs, which are village level voluntary action groups of youth at the grassroots level to involve them in nation building activities.
- The core strength of NYKS lies in its network of youth clubs. Youth Clubs are village based organizations working for community development and youth empowerment.

Prelims Factoids: A High Level Committee constituted to commemorate the 125th birth anniversary of Netaji Subhas Chandra Bose

Relevance IN – Prelims (about the High Level Committee and its role)

What's the NEWS

- A High Level Committee, headed by the Prime Minister Shri Narendra Modi, has been constituted to commemorate the 125th birth anniversary of Netaji Subhas Chandra Bose in a befitting manner.

Know! about the committee

- The High Level Committee will decide on the activities for a one year long commemoration, beginning 23rd January 2021.
- The Members of the Committee include distinguished citizens, historians, authors, experts, family members of Netaji Subhas Chandra Bose, as well as eminent persons associated with Azad Hind Fauj (INA).

- The Committee will lend guidance to the commemoration activities in Delhi, Kolkata and other places associated with Netaji and Azad Hind Fauj, both in India as well as overseas.

Prelims Factoids: Rangit Stage-IV Hydro Electric Project

Relevance IN – Prelims (about Rangit Stage-IV Hydro Electric Project- location)

What's the NEWS

- NHPC Limited, India's premier hydropower company and a PSU under Ministry of Power, has signed Definitive Agreement for implementation of the Approved Resolution Plan for takeover of 120 MW Rangit-IV HE Project of Jalpower Corporation Limited (JPCL) in Sikkim.

Know! about the resolution

- National Company Law Tribunal (NCLT), Hyderabad bench approved NHPC's Resolution Plan for taking over Jalpower Corporation Limited (JPCL)
- NHPC had submitted its Resolution Plan and was declared the successful resolution applicant by Committee of Creditors (CoC)
- CoC approved Resolution Plan was filed by Resolution Professional with Hon'ble NCLT Hyderabad Bench
- The total cost of the project is estimated as Rs.943.20 Crore. Jalpower Corporation Limited is the second company after LancoTeesta Hydro Power Ltd (LTHPL) to be acquired through NCLT process by NHPC.



Know! about Rangit Stage-IV Hydro Electric Project

- The Government of Sikkim as a part of national drive for the development of Hydro Potential of the country has awarded Rangit Stage-IV Hydro Electric Project to Jal Power Corporation Limited on 1st Nov. 2004.
- An agreement for setting up of Rangit Stage-IV Hydro Electric Project was signed with the Govt. of Sikkim on 9th December, 2005 on Build, Own, Operate and Transfer (BOOT) basis under joint sector with the State Government through Sikkim Power Development Corporation (SPDC).
- The project, a Run of the River (ROR) scheme, is located in West Sikkim district of Sikkim.
- Rangit Stage-IV Hydro Electric Project was identified as a part of the master plan evolved in 1974 for the development of hydro power potential of Teesta and Rangit rivers of Sikkim.

Government Schemes: Crop Insurance Scheme – The Pradhan Mantri Fasal Bima Yajana (PMFBY) successfully completes 5 Years of operations

Relevance IN – Prelims (about PMFBY)

What's the NEWS

- 5 years ago, on 13th January 2016, the Government of India took a historic step towards strengthening risk coverage of crops for farmers of India and approved the flagship crop insurance scheme - the Pradhan Mantri Fasal Bima Yojana (PMFBY).

Know! the features of the scheme

- The scheme was conceived as a milestone initiative to provide a comprehensive risk solution at the lowest uniform premium across the country for farmers.
- Premium cost over and above the farmer share is equally subsidized by States and GoI. However, GoI shares 90% of the premium subsidy for North Eastern States to promote the uptake in the region.
- The average sum insured per hectare has increased from 15,100 during the pre-PMFBY Schemes to 40,700 under PMFBY.



- As an end to end risk mitigation mechanism for farmers, the scheme extends coverage for the entire cropping cycle from pre-sowing to post-harvest including coverage for losses arising out of prevented sowing and mid-season adversities.
- Individual farm level losses arising out of localized calamities and post-harvest losses are also covered due to perils such as inundation, cloudburst and natural fire.
- Integration of land records with the PMFBY portal, Crop Insurance mobile-app for easy enrollment of farmers and usage of technology such as satellite imagery, remote-sensing technology, drones, artificial intelligence and machine learning to assess crop losses are some of the key features of the scheme.
- The scheme makes it easier for the farmer to report crop loss within 72 hours of occurrence of any event through the Crop Insurance App, CSC Centre or the nearest agriculture officer.
- As an endeavor to constantly bring about improvements, the scheme was made voluntary for all farmers, post its revamp in February 2020.
- Further the States have also been provided flexibility to rationalize the sum insured so that adequate benefit can be availed by farmers.
- The Scheme covers over 5.5 crore farmer applications year on year.
- Till date, claims worth Rs 90,000 crores have already been paid out under the Scheme.

Prelims Factoids: DRDO develops India's first indigenous machine pistol ASMI



Relevance IN – Prelims (about ASMI)

What's the NEWS

- The Defence Research and Development Organisation (DRDO) has developed India's first indigenous machine pistol ASMI, capable of firing at 100 metres range
- The pistol, developed by the DRDO with the help of the Indian Army, has been specially designed to replace the erstwhile 9 mm pistols in the defence forces.

Know! all about ASMI

- India's first indigenous machine pistol ASMI developed jointly by DRDO (Defence Research and Development Organisation) and Indian Army displayed today at the Army's innovation display event.
- The gun would be offered to replace the 9 mm pistols in the defence forces
- These machine pistols are in the class of the Uzi series guns of Israel. They are capable of firing at a distance of 100 meters.
- The machine pistol prototype, developed by the DRDO, has fired more than 300 rounds in the last four months of its development.
- The country's first indigenous machine pistol ASMI will soon be handed over to the Indian Army for use.

Defence: DRDO hands over Motor Bike Ambulance 'Rakshita' to CRPF

Relevance IN – Prelims (about Rakshita)

What's the NEWS

- Institute of Nuclear Medicine and Allied Sciences (INMAS), Delhi based DRDO laboratory, handed over Rakshita, a bike-based casualty transport emergency vehicle to Central Reserve Police Force (CRPF)

Know! about the bike ambulance

- The bike ambulance will help in overcoming the problems faced by Indian security forces and emergency healthcare providers.
- It will provide life-saving aid for evacuation of injured patients from low intensity conflict areas.
- This will be handy in the congested streets and remote locations, where access through ambulance is difficult and time consuming.
- The bike can respond to a medical emergency need of patients faster than a four-wheeler due to its functionality and integrated emergency medical support system.
- Rakshita is fitted with a customized reclining Casualty Evacuation Seat (CES), which can be fitted in and taken out as per requirement.
- Other major features are the head immobilizer, safety harness jacket, hand and foot straps for safety, adjustable footrest, physiological parameter measuring equipment with wireless monitoring capability and auto warning system for driver.
- The vital parameters of the patient can be monitored on the dashboard mounted LCD. It is also equipped with air splint, medical and oxygen kit for on spot medical care.
- This bike ambulance is useful not only for the paramilitary and military forces but has potential civil applications too.



Prelims Factoids: PARAKRAM DIWAS

Relevance IN -Prelims (about Parakram diwas + about the activities of various ministries to commemorate the 125th Birth Anniversary

What's the NEWS

- Government of India has decided to celebrate the 125th Birth Anniversary year of Netaji Subhas Chandra Bose in a befitting manner at national and international level, beginning from 23rd January 2021.



भारत का राजपत्र The Gazette of India

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असाधारण
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भाग 1 - भाग 1
PART I - Section 1

प्रकाशित के द्वारा
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(विशेष प्रकाश)

अभिप्रेत

नई दिल्ली, 19 जनवरी, 2021

F. No. 21037/1/2021. विशेष सूचना. — जहाँ भारत के लोग, नेताजी सुभाष चंद्र बोस की 125 वीं जयंती वर्ष में, इस महान राष्ट्र के लिए उनके अतुल्य योगदान को याद करते हैं;

और जहाँ भारत सरकार ने नेताजी सुभाष चंद्र बोस की 125 वीं जयंती वर्ष को 23 जनवरी 2021 में आने वाले वर्ष का विशेष दिनांक है, ताकि राष्ट्रीय और अंतर्राष्ट्रीय स्तर पर उनका सम्मान किया जा सके;

अतुल्य, नेताजी की अद्वय भावना और राष्ट्र के लिए उनके निः स्वार्थ सेवा के सम्मान में और उनको याद रखने के लिए, भारत सरकार ने हर साल 23 जनवरी पर उनके जन्मदिन को 'पराक्रम दिवस' के रूप में मनाने का फैसला किया है। इससे देश के लोगों, विशेषकर युवाओं को विपत्ति का सामना करने के लिए नेताजी के जीवन में देखा मिलेगी और उनसे देशभक्ति और राष्ट्र की भावना समाहित होगी।

- A High Level Committee, headed by the Prime Minister Shri Narendra Modi, has been constituted for deciding the programs, and to supervise and guide the commemoration.
- In order to honour and remember Netaji's indomitable spirit and selfless service to the nation, Government of India has decided to celebrate his birthday on the 23rd day of January every year as "**PARAKRAM DIWAS**" to inspire people of the country, especially the youth, to act with fortitude in the face of adversity as Netaji did, and to infuse in them a spirit of patriotic fervour.
- Gazette Notification for declaring 23rd January as "ParakramDiwas" has been published.

Activities to commemorate the 125th Birth Anniversary year of Netaji Subhas Chandra Bose

- The Minister of Culture announced that the year long celebrations to commemorate 125th birth anniversary year of Netaji Subhas Chandra Bose will formally commence on 23rd January, 2021.
- Prime Minister will preside over the inaugural event of the celebrations being held at Kolkata
- The 125th Birth Anniversary year of Netaji Subhas Chandra Bose will be celebrated in a befitting manner at national and international level.
- A High Level Committee, headed by the Prime Minister Shri Narendra Modi, has been constituted for deciding the programs, and to supervise and guide the commemoration throughout the year.
- The Committee will provide guidance for the commemoration activities in Delhi, Kolkata and other places associated with Netaji and Azad Hind Fauj, both in India as well as overseas.

Ministry of Culture has proposed a number of activities and projects for this year-long commemoration.

- The inaugural function of the commemoration will be held at Victoria Memorial in Kolkata on 23rd January 2021 presided over by the Prime Minister.
- A permanent exhibition on Netaji and a Projection Mapping Show will be inaugurated on the occasion.
- A cultural program "AmraNutonJouboneriDoot" will also be held based on the theme of Netaji.
- The Ministry of Culture will also be organising programme at Netaji's birthplace in Cuttack, Orissa.
- Tourism Ministry will be sponsoring this year the National Level indigenous games including Kabaddi Tournament which has been organised for the last 37 years on Netaji's Birth Anniversary in Madhya Pradesh's Narshingpur District by the 'SahyogKrida Mandal'.
- Ministry of Education proposes to establish 5 chairs on Netaji in 5 Indian Universities, organize online Lectures and Webinars on teachings of Netaji, etc.

The National Implementation Committee

- Earlier, in order to honour Netaji's unparalleled contribution to the country, the National Implementation Committee in its meeting held on 25th November 2020 decided to commemorate the 125th Birth Anniversary year of Netaji Subhas Chandra Bose in a befitting manner at national and international level.

- The Members of the Committee includes distinguished citizens, historians, authors, experts, family members of Netaji Subhas Chandra Bose, as well as eminent persons associated with Azad Hind Fauj (INA).

Defence: Indo-French Exercise Desert Knight-21

Relevance IN -Prelims (about Ex Desert Knight-21 and other Indo – French bilateral exercise)

What's the NEWS

- Indian Air Force and French Air and Space Force (*Armée de l'Air et de l'Espace*) will conduct a bilateral Air exercise, Ex Desert Knight-21 at Air Force Station Jodhpur from 20 to 24 Jan 21.

Know! all about the bilateral Air exercise

- French side will participate with Rafale, Airbus A-330 Multi-Role Tanker Transport (MRTT), A-400M Tactical Transport aircraft and approximately 175 personnel.
- The Indian Air Force aircraft participating in the exercise will include Mirage 2000, Su-30 MKI, Rafale, IL-78 Flight Refuelling Aircraft, AWACS and AEW&C aircraft.
- The exercise marks an important milestone in the series of engagements between the two Air forces.
- As part of Indo-French defence cooperation, Indian Air Force and French Air and Space Force have held six editions of Air Exercises named 'Garuda', the latest being in 2019 at Air Force Base Mont-de-Marsan, France.
- As measures to further the existing cooperation, the two forces have been gainfully utilising available opportunities to conduct 'hop-exercises'.
- The French Air and Space Force deployment while ferrying to Australia for Ex Pitchblack in 2018 was hosted by IAF at Air Force Stations Agra and Gwalior for exercise with fighters and MRTT aircraft.
- Presently, the French detachment for Ex Desert Knight-21 is deployed in Asia as part of their 'Skyros Deployment' and will ferry in forces to Air Force Station Jodhpur.
- The exercise is unique as it includes fielding of Rafale aircraft by both sides and is indicative of the growing interaction between the two premier Air Forces.
- As the two detachments commence their air exchange from 20 Jan onwards, they will put into practice operational experience gained across terrains and spectrums and endeavour to exchange ideas and best practices to enhance interoperability.



Miscellaneous: CSMRS - Central Soil and Material Research Station.



Relevance IN -Prelims (about CSMRS) + Mains (GS II government policies and interventions + GS III infrastructure development – energy)

What's the NEWS

- A review meeting of the CSMRS has been conducted recently.
- CSMRS is a state of the art Research institute which is famous for its core competency in Investigation, Consultancy and applied research in challenging Geo-technical environment in large scale Water resources projects.
- CSMRS is the only union organization dealing with soils, rocks, concrete, rockfill, geosynthetics and other materials for WR Projects.

Know! all about CSMRS

- The Institute is pioneer in Geotechnical Survey and Analysis.
- It provides consultancy to Strategic International projects like Punatsangchu (Bhutan)
- It plays a fundamental role under the DRIP Programme of Ministry of Jal Shakti
- The Institute plays a pivotal role in carrying out the investigation and analysis of the soil, rock and other geological parameters which is critical for the design and construction of large scale structures like Dams, Barrages, Water canals etc.
- CSMRS is making silent yet significant contribution in almost every WR project of National and International importance for eg - Polavaram project, Andhra Pradesh, SardarSarovar Dam Project, BhaunratDam, U.P, Kholongchhu HE project, Bhutan, Punatsangchhu HE project, Bhutan, projects in Afghanistan and Myanmar etc.
- CSMRS has an instrumental role to play in the Ongoing DRIP - Dam Rehabilitation & Improvement Project.
- The Government has allocated funds under the DRIP Project for procurement of cutting edge software and equipment for CSMRS.
- The Director of the Institute informed that 2 Software for real time Data Analysis and study of structural behaviour during and post construction stages, namely FLAC 2F and RS2/PHASE 2 have been procured along with other equipment.
- The Government has also provided Nod for specialized training and capacity building of CSMRS scientists at Swansea University, UK and Norwegian Geotechnical Institute Oslo, Norway.

The Central Soil and Materials Research Station (CSMRS)

- It is an attached office of the Department of Water Resources, River Development & Ganga Rejuvenation, Ministry of Jal Shakti was established in 1954.
- CSMRS is an ISO 9001:2015 certified organization which deals with field and laboratory investigations, basic and applied research and problems in geotechnical engineering, concrete technology, construction materials and associated environmental issues, having direct bearing on the development of irrigation and power in the country and functions as an adviser and consultant in the above fields to various projects and organizations in India and abroad.
- CSMRS undertakes consultancy works pertaining to the proposed projects, mostly in the area of water resources sector, in the domain of investigation with reference to laboratory and in-situ testing for foundations on soils and rocks and investigations for the construction materials, like – concrete (and its constituents), soil, geosynthetics, Rockfill etc.
- The consultancy work comprises suggestions, based on the recommended parameters of the investigated materials (required for the design of structures) and remedial measures to be adopted for the problems encountered at/by the project.
- In several instances, CSMRS is also called upon to ascertain the veracity of investigations in case of disputed/unreliable investigations.
- CSMRS also undertakes quality control works for the under construction projects.
- CSMRS provides assistance to the projects for setting up of the quality control laboratories at the project site and renders its expertise for the quality assurance of the projects.
- CSMRS can take up any challenging investigation works in respect of dams, bridges, multi-storey buildings, nuclear and thermal power stations besides safety evaluation of existing hydraulic and other civil engineering projects.

Governance: National Startup Advisory Council

Relevance IN -Prelims (all about National Startup Advisory Council)

What's the NEWS

- The Central Government has now decided to nominate the non-official members on the National Startup Advisory Council representing various stakeholders such as founders of successful startups, veterans who have grown and scaled companies in India, persons capable of representing interest of investors into startups, persons capable of representing interests of incubators and accelerators, representatives of associations of stakeholders of startups and representatives of industry associations.

Startup Advisory Council

- The term of the Non-official members of the Startup Advisory Council shall be for a period of two years or until further orders, whichever is earlier.
- Department for Promotion of Industry and Internal Trade (DPIIT) had constituted the 'National Startup Advisory Council' India dated 21st January 2020 to advise the Government on measures needed to build a strong ecosystem for nurturing innovation and startups in the country to drive sustainable economic growth and generate large scale employment opportunities.

The council shall, *inter alia*, suggest measures to:

- Foster a culture of innovation amongst citizens and students in particular;
- Promote innovation in all sectors of economy across the country, including semi-urban and rural areas;
- Support creative and innovative ideas through incubation and research and development to transform them into valuable products, processes or solutions to improve productivity and efficiency;
- Create an environment of absorption of innovation in industry;
- Facilitate public organizations to assimilate innovation with a view to improving public service delivery;
- Promote creation, protection and commercialization of intellectual property rights;
- Make it easier to start, operate, grow and exit businesses by reducing regulatory compliances and costs;
- Promote ease of access to capital for startups;
- Incentivize domestic capital for investments into startups;
- Mobilize global capital for investments in Indian startups;
- Keep control of startups with original promoters.
- Provide access to global markets for Indian startups.

Prelims Factoids: Ratle Hydro Power Project

Relevance IN – Prelims (about Ratle Hydro Electric (HE) Project -location and features)

What's the NEWS

- The Union Cabinet, chaired by the Prime Minister, has given its approval for the investment of Rs.5281.94 crore for 850 MW Ratle Hydro Electric (HE) Project located on river Chenab, in Kishtwar district of Union Territory of Jammu and Kashmir, by a new Joint Venture Company (JVC) to be incorporated between National Hydroelectric Power Corporation (NHPC) and Jammu & Kashmir State Power Development Corporation Ltd (JKSPDC) with equity contribution of 51% and 49% respectively.

Know! more about the project

- Government of India is also supporting the Union Territory of Jammu and Kashmir by providing grant of Rs. 776.44 crore for Equity contribution of JKSPDC in the JVC to be set up for construction of Ratle HE Project (850 MW).
- The Ratle Hydro Electric Project shall be commissioned within a span of 60 months.
- The Power generated from the Project will help in providing balancing of Grid and will
- The construction activities of the Project will result in direct and indirect employment to around 4000 persons and will contribute in overall socio-economic development of the Union Territory of Jammu and Kashmir.

Cabinet Decisions 20 January 2021

my GOV मेरी सरकार

Powering Growth & Development in J&K

Investment Proposal of ₹5281.94 Crore for 850 MW Ratle Hydro Power Project Approved

-  A new Joint Venture Company to be incorporated between NHPC* and JKSPDC** for construction of the project, located on river Chenab in J&K
-  GoI to provide a grant of ₹776.44 crore for equity contribution of JKSPDC & NHPC to invest ₹808.14 crore
-  Will result in direct & indirect employment to around 4000 persons in J&K; the project to be commissioned within a span of 60 months
-  UT of J&K to get free power worth ₹5289 crore and ₹9581 crore through levy of Water Usage Charges during the project life of 40 years

*National Hydroelectric Power Corporation | **J&K State Power Development Corporation Ltd *Representational Picture

- The Ratle Hydroelectric Plant is a run-of-the-river hydroelectric power station currently under construction on the Chenab River, downstream of the village near Drabshalla in Kishtwar district of the Indian Union Territory of Jammu and Kashmir.
- The project includes a 133 m (436 ft) tall gravity dam and two power stations adjacent to one another.

Prelims Factoids: DRI seizes 55.61 kg of foreign gold worth Rs 28 crore

Relevance IN – Prelims (about Golden Triangle + about DRI)

What's the NEWS

- In a spectacular bust of the Myanmar-India gold smuggling network, the Delhi Zonal Unit of the Directorate of Revenue Intelligence (DRI) seized 55.61 kg of foreign origin gold valued at Rs. 28 crore from eight persons at two locations, i.e. Delhi and Lucknow on 21st January, 2021.
- The operation, codenamed “**Golden Triangle**”, was a coordinated effort by the officers of Delhi Zonal Unit and Lucknow Zonal Unit of DRI
- The modus of human concealment has been busted where the carriers were found to have been concealing the gold bars in belts worn around their waists.

The Directorate of Revenue Intelligence (DRI)

- It is an Indian intelligence agency. It is India's apex anti-smuggling intelligence, investigations and operations agency.
- The Directorate is run by officers from the Central Board of Indirect Taxes and Customs (CBIC) who are posted in its various Zonal Units as well as in Indian embassies abroad as part of the Customs Overseas Intelligence Network.
- It is headed by a Director General of the rank of Special Secretary to the Government of India.

- The Agency works to secure India's national and economic security by preventing the outright smuggling of contraband such as firearms, gold, narcotics, Fake Indian Currency notes, antiques, wildlife and environmental products.
- It also works to prevent the proliferation of black money, trade based money laundering and commercial frauds.

Defence: Joint Operation in Andaman Sea: Exercise Kavach

Relevance IN – Prelims (about Exercise Kavach)

What's the NEWS

- A large scale Joint Military exercise 'Exercise Kavach' involving assets of Indian Army, Indian Navy, Indian Air Force and Indian Coast Guard is being conducted in the coming week under the aegis of the Andaman and Nicobar Command (ANC), the only Joint Forces Command of the country.

Know! all about Exercise Kvach

- The exercise would involve participation and deployment of elements of Army's Amphibious Brigade along with supporting forces including Special Forces of Navy, Armour/Mechanised components, Naval Ships comprising Destroyers, ASW Corvettes and Landing Ships with ship-borne helicopters of Eastern Naval Command and ANC, Jaguar Maritime Strike and Transport aircrafts from Indian Air Force and assets of Coast Guard.
- The exercise involves synergised application of maritime surveillance assets, coordinated air and maritime strikes, air defence, submarine and landing operations.
- Concurrently Joint Intelligence Surveillance and Reconnaissance (ISR) exercise involving various technical, electronic and human intelligence from three services will be conducted.
- The ISR exercise will validate the capabilities of intelligence gathering from space, air, land and sea-based assets/ sensors, its analysis and sharing to achieve battle field transparency for quick decision making at different stages of operations.
- The joint force would execute multi domain, high intensity offensive and defensive manoeuvres in the Andaman Sea and Bay of Bengal and carry out amphibious landing operations, air landed operation, helicopters-borne insertion of Special Forces from sea culminating in tactical follow-on operations on land.
- The tri-services exercise aims to fine tune joint war-fighting capabilities and SOPs towards enhancing operational synergy.



Government Schemes: 'Ayushman CAPF' scheme

Relevance IN – Prelims (about Ayushman CAPF' scheme)

What's the NEWS

- The Union Home Minister Shri Amit Shah launched the 'Ayushman CAPF' scheme for personnel and dependents of the Central Armed Police Forces

Know! about Ayushman CAPF' scheme

- Now all CAPF personnel and their families will receive free treatment with a simple card swipe in 24,000 hospitals.

- The scheme will be fully implemented by 1st May and an effort will be made that the Ayushman shield becomes available to all, through the efforts of the Prime Minister by 1st May.
- A health card will also be given to all CAPF personnel and their families and all CAPF personnel can receive a medical checkup once every year and their families once in three years.
- The Prime Minister Ayushman scheme has already served around two crore people, and provides free treatment upto Rs. five lakh to the poor and the needy
- The patients are also given Rs. 250 to commute back to their homes after treatment. The lives of India's 60 crore poor have been transformed by this cashless system.

Social Issues: DEPwD'S Tableau on Indian Sign Language



Relevance IN – Prelims (about Indian Sign Language (ISL) + Mains (GS II Social issue and Social Justice)

What's the NEWS

- The Tableau of Indian Sign Language Research and Training Centre (ISLRTC), Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Social Justice and Empowerment at the this year's Republic Day Parade will showcase the theme 'Bhartiya Sanketik Bhasha– Ek Rashtra, Ek Sanketik Bhasha'.
- It will highlight the unifying nature of Indian Sign Language (ISL) in a nation, where there is a great diversity in spoken languages.
- The aim of the Tableau is to raise awareness and highlight the commitment of the Government towards creating a barrier-free environment for persons with hearing disabilities by promoting ISL.

Indian Sign Language.

- Sign language is a visual language that uses hands, facial and body movements as a means of communication for persons with hearing disabilities.
- It is a unique and unifying language that connects all persons with hearing disabilities in the country.
- There are many spoken languages in the country, but there is only one Indian Sign Language.
- With a view to enhancing accessibility for the hearing impaired, a need was felt to set up an Institute focusing on the development and furtherance of Indian Sign Language.
- Accordingly, Indian Sign Language Research and Training Centre (ISLRTC), New Delhi was set up on 28th September, 2015, as an autonomous body under the Department of Empowerment of Persons with Disabilities (Divyangjan), Ministry of Social Justice and Empowerment.

- The main objective of the Centre is to develop manpower for using, teaching and conducting research in Indian Sign Language.
- ISLRTC conducts courses for developing Indian Sign Language (ISL) Interpreters and teachers and provides interpretation services to organizations for various programs & events.
- It has developed a dictionary of ISL containing 6000 Academic, Medical, Legal and Agricultural terms in addition to terms of everyday use.
- The Centre also provides Short Term Training Programmes on basic ISL communication skills.
- To make educational materials accessible for children with hearing disabilities, ISLRTC has signed an MoU with National Council of Educational Research and Training (NCERT).
- As part of this MoU, educational print materials such as school text books of Classes I to XII of all subjects (both Hindi and English medium) are being converted into ISL.

Science & Technology: Aqua Rejuvenation Plant

Relevance IN – Prelims (about Aqua Rejuvenation Plant (ARP))

What's the NEWS

- CSIR-CMERI inaugurated the 'Aqua Rejuv'
- CSIR-Central Mechanical Engineering Research Institute, Durgapur unveiled the first-ever Waste Water Treatment Technology Model which purifies Waste Water for Irrigation/Farming purposes.

Aqua Rejuvenation Plant (ARP)

- It is an Integrated Waste Water Rejuvenation Model which has six-stage purification profile for comprehensive treatment of Waste Water, based upon diverse purification parameters.
- The approx. 24,000 litres of water that can be rejuvenated using ARP will be sufficient for almost 4 acres of Agricultural Land (barring seasonal variations in water requirements).
- The used filtration media have been specially developed to handle Indian Sewage Water Parameters and based upon Geographical Variations they may be modified.
- The filter media is also locally source-able, so as to ensure that there would not be any stress in the Supply Chain for scaled-up Manufacturing of ARP.
- The treated water which is now being used for irrigation can be used even for drinking purpose also when little more time is given for settling.
- The system has a dual benefit as while the treated water is being used for irrigation purpose, the filtered sludge generated is also utilized as manure/fertilizer.

Prelims Factoids: Bharat Parv 2021



Relevance IN – Prelims (about about Bharat Parv)

What's the NEWS

- Lok Sabha Speaker Shri Om Birla inaugurated the 'Bharat Parv 2021', a virtual national festival showcasing the country's diverse culture, cuisines and handicrafts.

- The Ministry of Tourism in collaboration with other central Ministries is organizing this year a virtual 'Bharat Parv' event from 26th to 31st January 2021, showcasing the spirit of 'Ek Bharat Shreshtha Bharat'.
- Through the 'Bharat Parv' programme, the Ministry has taken the commendable task of bringing together India's tourism, spiritual and other activities on a single platform.

Know! all about Bharat Parv

- The Ministry of Tourism, Government of India is organizing the Bharat Parv every year since 2016 in the front ground of the ramparts of the Red Fort in Delhi on the occasion of Republic Day Celebrations from 26th to 31st January.
- The mega event envisages generating patriotic fervor and showcases the rich and varied cultural diversity of the country.
- The Bharat Parv celebrates the "Essence of India". However, due to the Covid related circumstances it has been organized on a virtual platform this year
- Various Central Ministries and other organizations display handicrafts, handlooms, music, dance, paintings, literary material and other features from all over India during the celebration.
- Glimpses of Republic Day Parade and recorded performances of armed forces music bands shall also be available on this virtual platform this year.
- Various Central Institutes of Hotel Management and Indian Culinary Institute will also display culinary delights from across India by showcasing videos and recipes of cuisines.
- This unique virtual Bharat Parv 2021 will showcase multiple videos/ films, images, brochures and other information of various organizations.
- People from across the globe can enjoy this Bharat Parv extravaganza and experience the true Spirit of India at their convenience on their mobile phones, laptops, computers & other devices by logging on to www.bharatparv2021.com

Dekho Apna Desh initiative

- The objective of 'Dekho Apna Desh' initiative of Ministry of Tourism is to encourage citizens to travel widely within the country and enhancing tourist footfalls, leading to development of local economy and creation of jobs at the local level.
- This initiative is in line with the vision of the Prime Minister asking every citizen to visit at least 15 destinations by the year 2022 to promote domestic tourism.

Prelims Factoids: 11th National Voters' Day celebrations



Relevance IN – Prelims (about National Voters' Day – highlights)

What's the NEWS

- The President of India, Shri Ram Nath Kovind, virtually graced and addressed the 11th National Voters' Day Celebrations, being organised by the Election Commission of India, today (January 25, 2021).

- The theme for NVD 2021 is 'Making Our Voters Empowered, Vigilant, Safe and Informed.'
- This is a reiteration of the commitment of Election Commission of India (ECI) to conduct COVID-safe elections, as well as to make each voter informed, ethical and vigilant.
- During the event, the President conferred the National Awards for the year 2020-21 and also launched the Election Commission of India's Web Radio: 'Hello Voters' – an online digital radio service.

11th National Voters' Day (highlights)

Two unique digital initiatives were unveiled + 3 publications launched

- The Commission is rolling out digital voter identity cards or e-EPICs which will be downloadable on mobile phone or in a self-printable form on the computer, after logging in from Voter Helpline Mobile App, Voter Portal (www.voterportal.eci.gov.in) or National Voters' Service Portal (www.nvsp.in/).
- The President of India launched 'Radio Hello Voters' - a 24x7 online digital radio service that will stream voter awareness programmes accessible on the Election Commission of India website.
- Radio Hello Voters has been envisaged to provide information on electoral processes through songs, drama, discussions, podcasts, spots, parodies etc. in Hindi, English and different regional languages from all over the country.
- Three publications were launched by Union Minister Shri Ravi Shankar Prasad. The first book, **Conducting Elections during Pandemic- A Photo Journey** encapsulates the challenging journey of conducting elections amidst a pandemic.
- The second, **SVEEP Endeavours: Awareness Initiatives during Lok Sabha Election 2019** provides a detailed insight into voter awareness interventions, innovations and initiatives during the 17th General Election, conducted in 2019.
- **Chalo Karen Matdaan**- a comic book that aims at voter education in a fun and thought-provoking way targeting young, new and future voters was also launched at the event.

National Voters' Day

- The National Voters' Day has been celebrated on January 25 every year since 2011, all across the country to mark the foundation day of Election Commission of India, i.e. 25th January 1950.
- The main purpose of the National Voters' Day celebration is to encourage, facilitate and maximize enrolment, especially for the new voters.
- Dedicated to the voters of the country, the day is utilized to spread awareness among voters and for promoting informed participation in the electoral process

Miscellaneous: AYU SAMVAD Campaign

Relevance IN – Prelims (about AYU SAMVAD awareness campaign)

What's the NEWS

- **"AYU SAMVAD" (My Health My Responsibility) is one of the largest public awareness campaign program on AYURVEDA and COVID 19 PANDEMIC**, organized by All India Institute of Ayurveda New Delhi, as envisioned & supported by Ministry of AYUSH.
- More than 5 lac lectures will be organized across the nation by Ayurveda Physicians for citizens of India.

Know! about this public awareness campaign program on AYURVEDA

- All India Institute of Ayurveda organized online **Training of Trainers program** on AYUSH Ministry AVCC platform from 18 to 21 Jan, 2021 to Directors, principals of Ayurveda Colleges, Medical Officers, PG & Ph.D scholars, Practitioners and other stake holders all over India.



The poster for the AYU SAMVAD campaign features the logos of the Government of India, the Ministry of AYUSH, and the Ayurveda Virtual Convention Centre. The text reads: 'Ayush Virtual Convention Centre (Ministry of AYUSH) brings to you "AYU SAMVAD - Ayurveda against Covid 19", a campaign through a series of lectures. The lectures will be held by the All India Institute of Ayurveda (AIIA), New Delhi from the 26th of January to 30th April 2021. Preparation for the campaign begins tomorrow, with a 4 days online Training of Trainers (TOT) Programme.' Below the text is an illustration of a person sitting at a desk with a laptop, with several circular icons representing different aspects of Ayurveda and health. At the bottom, the dates and times for the TOT programme are listed: 'Date & Time : 18 & 19 January 2021 - 10.30 am onwards' and '20 & 21 January 2021 - 2.30 pm onwards'. A note at the very bottom states: 'You can watch this TOT Programme live on our Facebook Page and YouTube or click on the links given in the accompanying caption.'

- All India Institute of Ayurveda has drafted a power point presentation & booklet for reference.
- The trained personnel's will further organize lectures for Government Offices, Non-Government sector employees, schools, colleges, panchayati raj institutions, gram sabhas, industries, various housing societies, NGOs, Mahila udyogs, Asha workers and health staff etc across India.
- The PPT & training material will be uploaded on official website of ministry of AYUSH, AIIA, CCIM, CCRAS, RAV & others NIS, State AYUSH Directors for reference and will guide to organize lectures across India.
- Each trained person is expected to actively participate and deliver minimum 5 lectures each from 26th Jan 2021 to 30th March 2021 to people of India.

Objective of the Campaign

- The main objective of the campaign is to create awareness through Lecture series to make common people aware about the theme "Ayurveda for COVID 19 Pandemic".
- This campaign ensures the uniformity of information through a structured PPT delivered to approximately 01 crore target audience across India through 05 Lakh lectures.
- This campaign will be immensely beneficial in understanding the importance of Ayurveda & in the fight against COVID 19 & also for Post Covid Management.
- This campaign will specifically focus on the Role of Preventive, Promotive, Curative and Rehabilitation in Management of COVID 19 through Ayurveda.
- Campaign will monitor through State AYUSH Directors & NAM team. The report of the Documentation part of lectures & various activities will be submitted by state AYUSH Director in first week of May 2021.

Defence: Successful Maiden Test Launch of Akash-NG Missile



Relevance IN – Prelims (about Akash-NG (New Generation) Missile)

What's the NEWS

- DRDO conducted the successful maiden launch of Akash-NG (New Generation) Missile from Integrated Test Range off the coast of Odisha on 25 January 2021.

Akash-NG (New Generation) Missile

- Akash-NG is a new generation Surface to Air Missile meant for use by Indian Air Force with an aim of intercepting high manoeuvring low RCS aerial threats.
- The missile intercepted the target with textbook precision. The launch met all the test objectives by performing high manoeuvres during the trajectory.
- The performance of the Command and Control system, onboard avionics and aerodynamic configuration of the missile was successfully validated during the trial.

- During the test launch, entire flight path of the missile was monitored and the flight data was captured by various Range instruments such as Radar, EOTS and Telemetry systems deployed by ITR, Chandipur.
- The Multi Function Radar was tested for its capability of integration with the system.
- The Akash-NG system has been developed with better deploy ability compared to other similar systems with canisterized launcher and much smaller ground system footprint.
- The test launch was carried out by a combined team of DRDO, BDL & BEL in the presence of the representatives of Indian Airforce.

Defence: Indian Navy conducts Joint Exercise with Army and Air Force

Relevance IN – Prelims (about AMPHEX – 21 and Ex KAVACH)

AMPHEX – 21

- A large-scale tri-service joint amphibious exercise AMPHEX – 21 was conducted in Andaman & Nicobar group of islands from 21 – 25 Jan 2021.
- The exercise involved participation of Naval ships, amphibious troops of the Army and different types of aircraft from the Air force.
- The exercise was aimed at validating India's capabilities to safeguard the territorial integrity of its island territories.
- It also sought to enhance operational synergy and joint warfighting capabilities amongst the three Services.
- The exercise involved multi-faceted maritime operations by synergised employment of amphibious assault ships, surveillance platforms, execution of maritime air strikes and complex manoeuvres at sea.
- Airborne insertion of Marine Commandos of Navy and Special Forces of the Army, naval gunfire support, amphibious landing of forces and follow-on operations also formed part of the exercise.

Ex KAVACH

- Ex KAVACH for defence of Andaman & Nicobar Islands formed a part of AMPHEX – 21.
- Towards enhancing joint operational readiness, Indian Armed Forces conducted a large-scale conjoint military training exercise "KAVACH" alongwith "AMPHEX-21" in the Andaman Sea and Bay of Bengal.
- The exercise was conducted under the aegis of Andaman and Nicobar Command (ANC) with participation of Eastern Naval Command (ENC) and Army Southern Command (SC) involving assets of Army, Navy, Air Force and Coast Guard.
- The exercise involved participation and deployment of all forces of ANC, elements of Amphibious Brigade of Army's Southern Command along with corvettes, submarine and amphibious landing ships of Navy's Eastern Fleet and Marine Commandos. Jaguar Maritime Strike and transport aircraft from Indian Air Force and assets of Coast Guard also participated.
- The exercise validated joint capabilities of intelligence gathering from space, air, land and sea based assets, its synthesis, analysis and near real time sharing to achieve battle field transparency for quick decision making.
- The joint force executed multi-domain, high intensity offensive and defensive manoeuvres in the Andaman Sea and Bay of Bengal.
- The tri-services exercise fine-tuned joint war fighting capabilities and Standard Operating Procedures towards enhancing operational synergy.

Defence: Integrated Weapon System Design Centre

Relevance IN – Prelims (about Integrated Weapon System Design Centre)

What's the NEWS

- The Vice President of India, visited DRDO's Dr APJ Abdul Kalam Missile Complex in Hyderabad and inaugurated the Integrated Weapon System Design Centre in the complex.



Integrated Weapon System Design facility

- The Integrated Weapon System Design facility will enhance the capability in design and development of command & control systems for surface-to-air missile (SAM) systems and ballistic missile defence (BMD) systems.
- The centre will give thrust to the overall system design and evaluation methodology for state-of-the-art missile systems and will help in improving the performance of missiles.
- This will play a major role in the realization of highly complex futuristic aerospace & defence systems.

Prelims Factoids: 4th edition of Future Investment Initiative Forum



Relevance IN – Prelims (about Future Investment Initiative Forum)

What's the NEWS

- The Union Minister for Health and Family Welfare addressed the 4th edition of the Future Investment Initiative Forum,
- The purpose of the forum being hosted in Riyadh was to find solutions on how business and government can expand access to healthcare, train healthcare workers, remove regulatory barriers and encourage investment in advanced health technologies.

Future Investment Initiative (FII)

- The Future Investment Initiative (FII) is an international platform for expert-led debate between global leaders, investors and innovators with the power to shape the future of global investment.
- It is focused on utilizing investment to drive growth opportunities, enable innovation and disruptive technologies, and address global challenges.
- The Future Investment Initiative Institute hosting the Fourth Edition of FII, a multi-hub conference held under the theme of “The Neo-Renaissance” that will link leaders, investors and policymakers as they reimagine the global economy amid the Covid-19 pandemic.

- FII is an annual investment forum held in Riyadh, Saudi Arabia, to discuss trends in the world economy and investment environment.
- It is hosted by the Public Investment Fund of Saudi Arabia (PIF).
- The first event was in October 2017 and featured the announcements of the launch of NEOM, a proposed \$500 bn independent economic zone in the northwest of Saudi Arabia.

National: 69th meeting of the North East Council (NEC)

Relevance IN – Prelims (about North East Council (NEC))

What's the NEWS

- The Union Home Minister chaired the 69th meeting of the North East Council (NEC) in Meghalaya capital, Shillong

Know! all about North East Council (NEC)

- The eight States of Northeast India viz. Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim, are members of the council, with their respective Chief Ministers and Governors representing them. Sikkim was added to the council in the year 2002.
- The headquarters of the council is situated in Shillong and functions under the Ministry of Development of North Eastern Region (DONER) of the Government of India
- The North Eastern Council was constituted in 1971 by an Act of Parliament.
- The constitution of the Council has marked the beginning of a new chapter of concerted and planned endeavour for the rapid development of the Region.
- Over the last thirty five years, NEC has been instrumental in setting in motion a new economic endeavour aimed at removing the basic handicaps that stood in the way of normal development of the region and has ushered in an era of new hope in this backward area full of great potentialities.
- The Council was initially set up as an advisory body but now sanctioned as a Regional planning body since 2002.
- They now discuss any matter in which the North Eastern States have a common interest and decide the action to be taken on any such matter.
- This was done so as to take care of the economic and social planning of these states, as well as to provide mediation in the event of inter-State disputes.

Prelims Factoids: Rapid Assessment System (RAS)

Relevance IN – Prelims (about Rapid Assessment System (RAS))

What's the NEWS

- Under the Covid Vaccination drive, the Government of India is using 'Rapid Assessment System (RAS)', a platform developed by Ministry of Electronics & IT (MeitY) for taking feedback from those who get vaccinated.
- This initiative to utilize RAS platform is aimed at improving the vaccination experience for citizens, while ensuring that all norms are being followed during the vaccination process at all vaccination centres.
- This feedback system will help the Government to make the vaccination process more citizen-friendly. RAS platform has already sent out around 6.2 lakh SMSes to all those who have been vaccinated in a short span of 4 days.
- The following process has been put in place to collect feedback on vaccination experience.
- Registered mobile numbers and names of those vaccinated on a day are sent to RAS system by Co-WIN platform at midnight.



- RAS system prepares a unique URL for feedback questions and sends personalized SMSs to all beneficiary of that day.
- SMS contains the name of the person, dose (first/ second), and a unique URL. The sender ID used for SMS is "GOVRAS".

About Rapid Assessment System (RAS):

- National e-Governance Division, Ministry of Electronics & IT, developed Rapid Assessment System (RAS) for online instant feedback for e-services (online as well as offline through counters) delivered by the Government of India and State Governments.
- The main objective of RAS is to continuously assess the quality of eServices, through feedback, under each e-Governance project and realign processes to achieve targeted benefits.
- RAS interface prompts the citizens to provide feedback about the quality of service immediately after the citizen avails an eService of the Government.
- The analytic features of RAS help integrated departments in system improvement and better delivery of services.

Defence: Successful Flight Test of Smart Anti Airfield Weapon

Relevance IN – Prelims (about Smart Anti-Airfield Weapon (SAAW))

What's the NEWS

- DRDO successfully conducted captive and release trial of indigenously developed Smart Anti-Airfield Weapon (SAAW) from Hawk-I of Hindustan Aeronautics Limited (HAL) off the Odisha coast on 21 January 2021.

Smart Anti-Airfield Weapon (SAAW)

- The smart weapon was successfully test fired from Indian Hawk-Mk132 of HAL. This was the 9th successful mission of SAAW conducted by DRDO till now.
- It was a text book launch, which met all mission objectives. The telemetry and tracking systems installed at Interim Test Range (ITR), Balasore captured all the mission events.
- SAAW is indigenously designed and developed by DRDO's Research Centre Imarat (RCI) Hyderabad.
- This is 125 Kg class smart weapon, capable of engaging ground enemy airfield assets such as radars, bunkers, taxi tracks, and runways etc. up to a range of 100 kms.
- The high precision guided bomb is light weight as compared to weapon system of the same class.
- The weapon was earlier successfully test fired from Jaguar aircraft.



Representational Image

Prelims Factoids: Joynagar moa

Relevance IN – Prelims (about Joynagar Moa and GI-tag)

What's the NEWS

- Joynagar Moa, a GI-tagged winter delicacy of West Bengal, was exported abroad for the first time in over a century.
- Authorities said if the export to Bahrain is successful, more consignments would follow.

Joynagar Moa

- This is for the first time Joynagar Moa is being exported since it was introduced in 1904.
- It is a seasonal Bengali sweetmeat delicacy prepared from date palm jaggery and Kanakchur khoi.

- The delicacy obtained the GI tag in 2014 and only around 25 manufacturers from Joynagar block in South 24 Parganas district, around 50 km south of Kolkata, are authorised to prepare the product.
- GI tag signifies a product has a specific geographical origin and enjoys a reputation because of it.
- Kanakchur Khoi (fried aromatic paddy), nolen gur (molasses), ghee, khoya kheer, cardamom, raisins, and cashew nuts, among others, are used to prepare the delicacy.

Geographical Indications

- A geographical indication or GI is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.
- Geographical Indications are part of the intellectual property rights that comes under the Paris Convention for the Protection of Industrial Property.
- In India, Geographical Indications registration is administered by the Geographical Indications of Goods (Registration and Protection) Act of 1999. Geographical indications are typically used for agricultural products, foodstuffs, wine and spirit drinks, handicrafts, and industrial products.

Prelims Factoids: Khadi Prakritik Paint

Khadi India

LAUNCH OF
Khadi Prakritik Paint
(India's First Cow Dung Paint)

by
Shri Nitin Gadkari
Hon'ble Minister of Micro, Small and Medium Enterprises

Guests of Honour

Shri Giriraj Singh
Hon'ble Minister of Fisheries, Animal Husbandry and Dairying

Shri Pratap Chandra Sarangi
Hon'ble Minister of State for Micro, Small and Medium Enterprises

in the august presence of
Shri Vinai Kumar Saxena
Hon'ble Chairman, KVIC

Date: 12th January, 2021

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Khadi India
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ECO-FRIENDLY COW DUNG PAINT

Khadi India
Prakritik Paint
ECO-FRIENDLY COW DUNG PAINT

Relevance IN – Prelims (about Khadi Prakritik Paint)

What's the NEWS

- An innovative new paint developed by Khadi and Village Industries Commission has been launched

Khadi Prakritik Paint

- The eco-friendly, non-toxic paint, called "**Khadi Prakritik Paint**" is a first-of-its-kind product, with anti-fungal, anti-bacterial properties.
- Based on cow dung as its main ingredient, the paint is cost-effective and odorless, and has been certified by Bureau of Indian Standards
- Khadi Prakritik Paint is available in two forms – distemper paint and plastic emulsion paint.
- The project was conceptualized by Chairman KVIC in March 2020, and later developed by Kumarappa National Handmade Paper Institute, Jaipur (a KVIC unit).
- The paint is free from heavy metals like lead, mercury, chromium, arsenic, cadmium and others.
- It will be a boost to local manufacturing and will create sustainable local employment through technology

transfer.

- This technology will increase consumption of cow dung as a raw material for eco-friendly products and will generate additional revenue to farmers and gaushalas.
- This is estimated to generate additional income of Rs 30,000 (approx) per annum per animal to farmers/gaushalas. Utilization of cow dung will also clean the environment and prevent clogging of drains.

Khadi Prakritik Distemper & Emulsion Paints have been tested at 3 reputed National Laboratories

- National Test House, Mumbai
- Shri Ram Institute for Industrial Research, New Delhi
- National Test House, Ghaziabad

Prelims Factoids: Co-WIN app

Know! all about Co-WIN app

- The application is in pre-product stage being accessed by health officials who are uploading the data of the health workers who will get vaccines in the first stage.
- More than 75 lakh beneficiaries have already been registered during the dry run.
- The Union health ministry and the ministry of electronics and information technology jointly announced a challenge inviting participants to take part where they will have to strengthen the final app.
- As of now, the app can not be accessed by people and there is no self-registration going on. It is being only accessed by officials as the app was tested during vaccine dry run too.
- Once launched, the app will have four modules: User administrator module, beneficiary registration, vaccination and beneficiary acknowledgement and status updation.

Features of Cowin

- Automated session allocation.
- Aadhaar authentication to prevent malpractices.
- Creation of unique ID for willing beneficiaries.
- Reporting and tracking of adverse events after immunisation.
- SMS in 12 languages and 24*7 helpline
- QR code-based vaccination certificate.
- Digilocker integrated for data retrieval and sorting QR code-based certificate.

Prelims Factoids: m-RNA VACCINE BY PFIZER

Relevance IN – Prelims (about m-RNA vaccine)

What's the NEWS

- Pfizer's BNT162b2 took 10 months from conception to approval and it is an m-RNA Vaccine, approved for use in humans for the first time.

PFIZER'S VACCINE

- This has been shown to be 95% effective in preventing COVID-19.
- It needs to be stored in boxes containing dry ice that are capable of staying at -70 Degree Celsius.
- Besides the UK, other countries such as Bahrain, Canada, Saudi Arabia, Mexico and USA have approved the emergency use of the Pfizer Vaccine.

m-RNA VACCINE

- Vaccines work normally by priming the body to recognise and fight the proteins produced by disease causing organisms.
- Normally, an inactivated virus or live attenuated virus is used to prepare the vaccines.
- However, an m-RNA Vaccine uses messenger RNA or m-RNA.
- It prompts an immune response in the body.

- m-RNA Vaccine has synthetic genetic material. It carries genetic instructions which direct the cells to make viral proteins that prime the immune system to produce protective antibodies.
- m-RNA Vaccines are said to be safer than live vaccines as there is a risk of the virus reverting to a dangerous form with the live vaccines.
- m-RNA Vaccines are not likely to produce unwanted reactions.
- They can be made much faster than the traditional vaccines.
- The biggest problem is cost and the low temperature, which they are required to be stored.

A promotional graphic for a 7-day trial. It features a large blue number '7' inside a white circle, followed by the word 'DAYS' in bold blue letters on a yellow background. Below this, 'Full Access' is written in orange on a black background, and '₹49 Only!' is in blue on a yellow background.



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GENERAL STUDIES II

**Governance, Constitution,
Polity, Social Justice and
International relations**

Governance: Digital India Awards 2020

Relevance IN – Prelims (about Digital India Awards 2020 – highlights) + Mains (GS II governance + transparency and accountability)

What's the NEWS

- The President of India, Shri Ram Nath Kovind, conferred Digital India Awards 2020
- Organised by NIC these awards help us to recognize the exemplary initiatives of various Government entities in Digital Governance.
- The President in his speech congratulated all the 24 winning teams and appreciated the role of officials and technical teams at various levels for ensuring continuity of Government services and operations during the COVID-19 pandemic
- Twenty-two digital governance initiatives/ products by Government entities under six categories received Digital India Awards 2020 for designing and implementing innovative citizen-centric digital solutions and improving the ease of living for all citizens.
- Awards under Jury Choice were given to Arogya Setu and eOffice.

	Category	Winners
1	Innovation in Pandemic	eSanjeevani – National Telemedicine Service
		COVID-19 Sample Collection Management System
		Aapda Sampooriti Portal
		Pravasi Shramik and Rojgar Setu Portal
2	Excellence in Digital Governance - MINISTRY / DEPARTMENT (Central)	eCommittee Supreme Court of India, Department of Justice
		Department of Posts
		Department of Fertilizers
		Department of Land Resources
3	Excellence in Digital Governance - STATE / UT	Haryana
		Tamil Nadu
		Uttar Pradesh
		West Bengal
4	Excellence in Digital Governance - DISTRICT	Khargone, Madhya Pradesh
		Changlang, Arunachal Pradesh
		Kamareddy, Telangana
5	Open Data Champion	Health Sector Data on OGD Platform India
		The Indian Council of Agricultural Research (ICAR)
		Food Corporation of India (FCI)
		Ministry of Micro, Small & Medium Enterprises (MSME)
6	Exemplary Product	Port Community System PCS1x - National Maritime Single Window
		ServicePlus - A metadata-based Service Delivery Platform
		Integrated Temple Management System - ITMS

7	Jury's Choice	ArogyaSetu
		eOffice

E-committee of Supreme court of India conferred with the Platinum award for Excellence in Digital Governance by the President of India

What's the NEWS

- E-committee of Supreme court of India was conferred with the Platinum award for Excellence in Digital Governance by the President of India in online Digital India Award presentation ceremony.



E-Courts project

- E-Courts project visioned and implemented by the eCommittee, Supreme court of India along with Department of Justice and NIC(National Information Centre) is a Mission Mode Project of Government of India.
- The project has set an example of a successful e-governance project reaping rich dividends to the Litigants and Citizens of the country
- Citizens can access Case status, causelist court orders anywhere, any time through e-courts services website, mobile app, sms email services from the 3293 court complexes.
- Moreover, Citizens/litigants/Lawyers and can get the details of 13.79 Cr cases, 13.12 Cr orders and judgments available online 24 X7 free of cost .

Defence: Cabinet Approves Export of Akash Missile System and Creates a Committee for faster Approval of Exports

Relevance in – Prelims (about Akash Missile + role of committee formed) + Mains (GS II India and its neighbourhood- relations).

What's the NEWS

- Under the Atma Nirbhar Bharat, India is growing in its capabilities of manufacturing wide variety of Defence platforms and missiles.
- Akash is country's important missile with over 96 percent indigenisation.
- Akash is a Surface to Air Missile with a range of 25 Kms. The missile was inducted in 2014 in IAF and in 2015 in Indian Army.
- After its induction in the Services, interest is shown in Akash missile by many friendly countries during International Exhibitions/Def Expo/Aero India.



Know! the role of the committee

- The Cabinet approval will facilitate Indian manufactures to participate in RFI/RFP issued by various countries.
- So far, Indian defence exports included parts/components etc. The export of big platforms was minimal.
- This initiative of the Cabinet would help the country to improve its defence products and make them globally competitive.
- The export version of Akash will be different from System currently deployed with Indian Armed Forces.
- Besides Akash, there is interest coming in other major platforms like Coastal Surveillance System, Radars and Air platforms.
- To provide faster approvals for export of such platforms, a Committee comprising of Raksha Mantri, External Affairs Minister and National Security Advisor has been created.
- This Committee would authorise subsequent exports of major indigenous platforms to various countries.
- The Committee would also explore various available options including the Government-to-Government route.
- Government of India intends to focus on exporting high value defence platforms, to achieve target of 5 Billion USD of defence export and improve strategic relations with friendly foreign countries.

Bilateral Relations: Cabinet approves MoU between India and Bhutan on Cooperation in the peaceful uses of outer space.

Relevance in – Prelims (about the MoU – highlights + Mains (GS II India and its neighbourhood- relations.

What's the NEWS

- The Union Cabinet chaired by Prime Minister approved Memorandum of Understanding (MoU) between the Government of the Republic of India and the Royal Government of Bhutan on Cooperation in the peaceful users of outer space

Know! about the MoU (highlights)

- This MoU shall enable India and Bhutan to pursue cooperation in potential interest areas, such as remote sensing of the earth; satellite communication and satellite based navigation; Space science and planetary exploration; use of spacecraft and space systems and ground system; and application of space technology.
- This MoU would lead to set up a Joint Working Group, drawing members from DOS/ISRO and the Ministry of Information and Communications (MoIC) of Bhutan, which will further work out the plan of action including the time-frame and the means of implementation.

Bhutanese engineers to train with ISRO for satellite launch next year

What's the NEWS

- Four Bhutanese space engineers arrived in India to train with the Indian Space Research Organisation (ISRO) for the launch of their country's satellite next year as part of New Delhi's efforts to build space infrastructure under its "neighbourhood first" policy.

Know! more about India- Bhutan space cooperation

- Prime Minister had announced during a virtual meeting with his Bhutanese counterpart Lotay Tshering on November 20 that India would launch the small satellite next year.
- Bhutan's first nano-satellite Bhutan-1, built with Japan's assistance, was launched on a SpaceX rocket in 2018.
- The space engineers from Bhutan's department of information technology and telecom will undergo the first phase of training at ISRO's UR Rao Satellite Centre in Bengaluru from December 28 to February 25.
- This training will cover theoretical and technical aspects and include visits to laboratories and test facilities, officials said.
- The Bhutanese team will also work with ISRO to draw up the second phase of training, which will include activities aimed at developing INS-2B satellite for Bhutan.
- India has been closely working with Bhutan in space technology. In August 2019, Modi and Tshering jointly inaugurated a ground earth station for the **South Asia Satellite (SAS) in Thimphu**, which was built with ISRO's support.

- SAS was launched by India in 2017 for countries in South Asia, and currently provides free services for television broadcasts and VSATs to members of the South Asian Association for Regional Cooperation (Saarc).
- The decision to collaborate on the development of a satellite for Bhutan was made during Modi's visit to Thimphu in August 2019.
- A joint working group was formed for the project and other activities, including developing a geo-portal system for Bhutan for natural resources and disaster management, using remote sensing and geo-spatial data.

Social Issues: Trifed Signs MoU with Akhil Bhartiya Vanvasi Kalyan Ashram for Setting up of TRIFOOD Parks in Madhya Pradesh

Relevance IN – Prelims (about the MoU – highlights + about TRIFOOD parks + about Vanvasi Kalyan Kendra + Van Dhan Scheme)

What's the NEWS

- TRIFED under Ministry of Tribal Affairs has decided to explore a convergence and build a partnership with Akhil Bhartiya Vanvasi Kalyan Kendra, a pioneering organization that has been working for the welfare of tribals in Madhya Pradesh, Chhattisgarh and Jharkhand since 1952.

Know! all about the MoU highlights

- A Memorandum of Understanding (MoU) was exchanged between the two organisations to work together for setting up of TRIFOOD Parks in 5 districts in Madhya Pradesh.
- The two organisations will work together by undertaking various initiatives all aimed at improving the livelihood of tribal people and implementation of the Van Dhan Yojana through the mobilization of Self Help Groups (SHGs) / VanDhanVikas Kendra (VDVKs) / VPCs / TRIFOOD Parks.
- With TRIFED as the mentoring organization, it has been agreed that VanvasiKalyan Ashram would form new Van DhanKendras in tribal areas by identifying SHGs, organize training, building infrastructure, provide machinery and equipment and other support.
- Among other scope of activities, Kalyan Ashram will include other areas, viz agriculture, horticulture, floriculture, fisheries, animal husbandry, handlooms, crafts to keep the operations running year-long and make the VanDhan scheme all-inclusive and viable.

VANVASI KALYAN KENDRA

- It is a voluntary organization to serve and engaged in creating complete awareness for neglected sections of our population was registered as a society in 1969.
- The tribal society mostly habitants in remote and destitute villages, where development could not reach yet after independence.
- Tribes remained illiterate, unaware about health hazards and so remained cut off from the main stream of the society.
- Vanvasi Kalyan Kendra, which is a registered State body of Akhil Bhartiya Vanvasi Kalyan Ashram, which is the largest voluntary organization of our country, dedicated to voluntary works among tribals.
- Keeping the objective of rectifying the neglect and bringing this vast segment of our society to mainstream of Indian polity.
- AKHIL BHARTIYA VANVASI KALYAN ASHRAM was established in 1952 in Jashpur in the state of MP now Chhattisgarh.

The Van Dhan Scheme

- The Van Dhan Scheme is an initiative of the Ministry of Tribal Affairs and TRIFED. It was launched on 14th April, 2018 and seeks to improve tribal incomes through value addition of tribal products.
- The scheme will be implemented through Ministry of Tribal Affairs as Nodal Department at the Central Level and TRIFED as Nodal Agency at the National Level.
- At State level, the State Nodal Agency for MFPs and the District collectors are envisaged to play a pivot role in scheme implementation at grassroot level.
- Locally the Kendras are proposed to be managed by a Managing Committee (an SHG) consisting of representatives of Van Dhan SHGs in the cluster.

Science & Technology: Swasth Vayu Non-invasive Ventilator

Relevance IN – Prelims (about SwasthVayu + about Non-invasive ventilation)

What's the NEWS

- CSIR-NAL scientists along with medical professionals from CSIR-IGIB indigenously designed and developed the non-invasive bilevel positive airway pressure ventilator –SwasthVayu, with additional features to treat Covid-19 patients and make the country self-reliant.
- The performance of the device has been evaluated by the expert committee constituted by Director General of Health Services, Ministry of Health & Family Welfare, Government of India.
- The expert committee, after careful evaluation, has concluded that SwasthVayu may be used on Covid-19 patients who require oxygen supplementation up to 35%.

Know! about SwasthVayu

- It has been developed by CSIR-NAL is a microcontroller based precise closed-loop adaptive control system with a built-in biocompatible “3D printed manifold and coupler” with HEPA filter (Highly Efficient Particulate Air Filter).
- These unique features help to alleviate the fear of the virus spread.
- It has features like CPAP, Bi-Timed, Spontaneous / AUTO modes with provision to connect Oxygen concentrator or Enrichment unit externally.
- The ventilator has gone through stringent tests for Electrical safety, performance and bio-compatibility at NABL accredited agency.
- The SwasthVayu has successfully conducted clinical trials at Command Hospital, Bangalore and Mysore Medical College & Research Institute, Mysore on 50 Covid-19 patients.
- CSIR-NAL has commercialized this technology with six private companies and one of these companies (which is in the MSME category) has set up the production facilities for almost 300 units per week.
- CSIR-NAL recently bagged an order for supply of 1200 SwasthVayu machines to Delhi Government, and the execution & installation at various hospitals in Delhi is being implemented.

Non-invasive ventilation (NIV)

- Non-invasive ventilation (NIV) is the delivery of oxygen (ventilation support) via a face mask and therefore eliminating the need of an endotracheal airway.
- NIV achieves comparative physiological benefits to conventional mechanical ventilation by reducing the work of breathing and improving gas exchange.
- The intervention is recognised as an effective treatment for respiratory failure in chronic obstructive pulmonary disease, cardiogenic pulmonary oedema and other respiratory conditions
- NIV works by creating a positive airway pressure - the pressure outside the lungs being greater than the pressure inside of the lungs.
- This causes air to be forced into the lungs (down the pressure gradient), lessening the respiratory effort and reducing the work of breathing
- There are two types of NIV non-invasive positive-pressure (NIPPV) and Negative-Pressure Ventilation (NPV).
- NIPPV describes the delivery of oxygen at either constant or variable pressures via a face mask, such as Bi-level Positive Airway Pressure (BiPAP) and Constant Positive Airway Pressure (CPAP)



Government Schemes: Govt of India's UJALA and SLNP completes six years of Illuminating India efficiently

Relevance IN – Prelims (about UJALA and Street Lighting National Programme (SLNP) + EESL) + Mains (GS II government policies and interventions + GS III infrastructure development – energy)

What's the NEWS

- Launched by Prime Minister on January 5, 2015 the Government of India's zero subsidy UnnatJyoti by Affordable LEDs for All (UJALA) and Street Lighting National Programme (SLNP) marks their sixth anniversary
- Both the programmes are being implemented by Energy Efficiency Services Limited (EESL), a joint venture of PSUs under the Ministry of Power, Government of India since their inception.

Know! all about UJALA and Street Lighting National Programme (SLNP)

- Under UJALA, EESL has distributed over 36.69 crore LED bulbs across India.
- With SLNP, EESL has installed about 1.14 crore LED streetlights across India.
- Both UJALA and Street Lighting National Programme have been at the heart of large scale socio-economic transformation.
- They have not only reduced emissions and enabled sustainable development, but have revamped household and public lighting systems, across the country.
- These programmes have bagged global awards like the prestigious South Asia Procurement Innovation Award (SAPIA) 2017, and for the innovative use of IT and business results achieved in Street Lighting National Programme (SLNP), it won CIO 100 award in 2019.
- The highly successful UJALA and SLNP have also bagged the Global Solid State Lighting (SSL) award of excellence for the transformational contribution to the LED sector, Award for High Impact Program for Energy Efficiency – CII National Award for Excellence in Energy Management 2020 and award of excellence at the 10th Elecs knowledge exchange summit and awards 2020.

Energy Efficiency Services Limited (EESL)

- It is a Super Energy Service Company (ESCO), which enables consumers, industries and governments to effectively manage their energy needs through energy efficient technologies.
- EESL is implementing the world's largest energy efficiency portfolio across sectors like lighting, buildings, electric mobility, smart metering, agriculture, etc. at a scale which no organization has been able to achieve.
- EESL's energy efficiency solutions have saved India over 47 billion kWh energy annually while reducing 36.5 million tonnes of carbon emission.
- Founded in 2009, EESL is promoted by Ministry of Power, Government of India as a Joint Venture of four reputed public- sector undertakings NTPC Limited, Power Finance Corporation Limited, REC Limited and POWERGRID Corporation of India Limited.
- EESL focuses on solution-driven innovation with no subsidy or capital expenditure (CAPEX). It is able to do so using its Pay-As-You-Save (PAYS) model, which obviates the need for any upfront capital investment by the consumer

Longitudinal Ageing Study of India (LASI) Wave-1, India Report released

Relevance IN – Prelims (about Longitudinal Ageing Study of India (LASI) Wave-1 -report highlights+ International Institute for Population Sciences, (IIPS) + United Nations Population Fund (UNFPA) and National Institute on Ageing.

What's the NEWS

- Dr. Harsh Vardhan, Union Minister for Health & Family Welfare released INDIA REPORT on Longitudinal Ageing Study of India (LASI) Wave-1 on the virtual platform.



Longitudinal Ageing Study of India (LASI)

- LASI is a full-scale national survey of scientific investigation of the health, economic, and social determinants and consequences of population ageing in India.
- The National Programme for Health Care of Elderly, Ministry of Health & Family Welfare has undertaken the Longitudinal Ageing Study of India, through International Institute for Population Sciences, (IIPS), Mumbai in collaboration with Harvard School of Public Health, University of Southern California, USA, Dte.GHS, United Nations Population Fund (UNFPA) and National Institute on Ageing.
- The LASI, Wave 1 covered a baseline sample of 72,250 individuals aged 45 and above and their spouses including 31,464 elderly persons aged 60 and above and 6,749 oldest-old persons aged 75 and above from all States and Union Territories (UTs) of India (excluding Sikkim).
- It is India's first and the world's largest ever survey that provides a longitudinal database for designing policies and programmes for the older population in the broad domains of social, health, and economic well-being.
- The evidence from LASI will be used to further strengthen and broaden the scope of National Programme for Health Care of the Elderly and also help in establishing a range of preventive and health care programmes for older population and most vulnerable among them."

Longitudinal Aging Study in India (LASI) – Report Highlights

- In 2011 census, the 60+ population accounted for 8.6% of India's population, accounting for 103 million elderly people.
- Growing at around 3% annually, the number of elderly age population will rise to 319 million in 2050
- 75% of the elderly people suffer from one or the other chronic disease.
- 40% of the elderly people have one or the other disability and 20% have issues related to mental health.
- This report will provide base for national and state level programmes and policies for elderly population.
- The LASI data shall assist in addressing the broad aims of the Decade of Healthy Ageing and will lead to convergence within various national health programs and also promote inter-sectoral coordination with other line Departments/Ministries.

Know! the methods involved in studying LASI

- The LASI has embraced state-of-the-art large-scale survey protocols and field implementation strategies including representative sample of India and its States, socioeconomic spectrum, an expansive topical focus, a longitudinal design, and the use of Computer Assisted Personal Interviewing(CAPI) technology for data collection, quality control, and Geographic Information System (GIS).
- A unique feature of LASI is the coverage of comprehensive biomarkers.

- No other survey in India collects detailed data on health and biomarkers together with information on family and social network, income, assets, and consumption.

Terms associated

The International Institute for Population Sciences (IIPS)

- It serves as a regional Institute for Training and Research in Population Studies for the ESCAP region.
- It was established in Mumbai in July 1956 and it was declared as a 'Deemed University' in August 19, 1985 under Section 3 of the UGC Act, 1956 by the Ministry of Human Resource Development, Government of India.
- Started in 1956 under the joint sponsorship of Sir Dorabji Tata Trust, the Government of India and the United Nations, it has established itself as the premier Institute for training and research in Population Studies for developing countries in the Asia and Pacific region.
- IIPS holds a unique position among all the regional centres, in that it was the first such centre to be started, and serves a much larger population than that served by any of the other regional centres.
- The Institute is under the administrative control of the Ministry of Health and Family Welfare, Government of India.
- Besides teaching and research activities, the Institute also provides consultancy to the Government and Non-Government organizations and other academic institutions.
- Over the years, the Institute has helped in building a nucleus of professionals in the field of population and health in various countries of the ESCAP region.
- During the past 53 years, students from 42 different countries of Asia and the Pacific region, Africa and North America have been trained at the

ESCAP region

- Since its founding in 1947 the Economic and Social Commission for Asia and the Pacific (ESCAP) serves as the United Nations' regional hub promoting cooperation among countries to achieve inclusive and sustainable development.
- The largest regional intergovernmental platform with 53 Member States and 9 associate members, ESCAP has emerged as a strong regional think-tank offering countries sound analytical products that shed insight into the evolving economic, social and environmental dynamics of the region.

National Institute on Aging

- The National Institute on Aging is a division of the U.S. National Institutes of Health, located in Bethesda, Maryland. The NIA itself is headquartered in Baltimore, Maryland.
- The NIA leads a broad scientific effort to understand the nature of aging and to extend the healthy, active years of life.
- In 1974, Congress granted authority to form NIA to provide leadership in aging research, training, health information dissemination, and other programs relevant to aging and older people.

National: Pravasi Bharatiya Divas Convention 2021



Relevance IN – Prelims (about Pravasi Bharatiya Divas (PBD) Convention) + Mains (GS II Indian Diaspora)

What's the NEWS

- Pravasi Bharatiya Divas (PBD) Convention is the flagship event of the Ministry of External Affairs and provides an important platform to engage and connect with the overseas Indians.
- In view of the sentiments of our vibrant diaspora community, the 16th Pravasi Bharatiya Divas Convention, is being organized on 9th January 2021
- The Convention will be held in virtual format, as were the PBD Conferences held recently in the run up to the Convention. The theme of 16th PBD Convention 2021 is “Contributing to Aatmanirbhar Bharat”.
- Pravasi Bharatiya Divas (PBD) Convention Chief Guest will be H.E. Mr. Chandrikapersad Santokhi, Hon’ble President of the Republic of Suriname.
- The names of the Pravasi Bharatiya Samman Awardees for 2020-21 will also be announced.
- Pravasi Bharatiya Samman Awards are conferred to select Indian diaspora members to recognize their achievements and honour their contributions to various fields, both in India and abroad.
- The Youth PBD will also be celebrated virtually on the theme “Bringing together Young Achievers from India and Indian Diaspora” on 8 January 2021, and will be anchored by the Ministry of Youth Affairs and Sports.

Pravasi Bharatiya Divas

- It is celebrated once in every two years to strengthen the engagement of the overseas Indian community with the Government of India and reconnect them with their roots.
- The day commemorates the return of Mahatma Gandhi from South Africa to Mumbai on 9 January 1915.
- Established in 2000, it is sponsored by the Ministry of External Affairs of the Government of India and the Federation of Indian Chambers of Commerce and Industry (FICCI), the Confederation of Indian Industries and the Ministry of Development of North Eastern Region.
- The 16th PBD Convention is being held Virtually on 9 January, 2021 in New Delhi. The theme of 16th PBD Convention 2021 is “Contributing to Aatmanirbhar Bharat”.
- PBD Convention will have three segments, starting with the Inaugural Session, when the PBD Convention will be inaugurated by Shri Narendra Modi, the Hon’ble Prime Minister of India and will include a keynote address by the Hon’ble Chief Guest, H.E. Mr. Chandrikapersad Santokhi, President of Republic of Suriname. The winners of the online Bharat ko Janiye Quiz will also be announced.

Pravasi Bharatiya Samman Award

- The Pravasi Bharatiya Samman Award is the highest honour conferred on a Non-Resident Indian, Person of Indian Origin; or an organisation or institution established and run by Non-Resident Indians or Persons of Indian Origin, who have made significant contribution in better understanding of India abroad, support India’s causes and concerns in a tangible way, community work abroad, welfare of local Indian community, philanthropic and charitable work, etc.
- During the PBD convention, select eminent Indian diaspora members are awarded the Pravasi Bharatiya Samman Awards in the presence of Hon’ble Rashtrapati.

Bharat Ko Janiye Quiz

- Bharat ko Janiye Quiz was launched in 2015-16 in order to strengthen the engagement with young overseas Indians and encourage them to know more about their country of origin.
- The first edition of the online “Bharat ko Janiye” Quiz was organized for young overseas Indians and foreigners of 18-35 years of age in 2015-16.
- This was followed by the second edition of Bharat ko Janiye Quiz in 2018-19.
- This year, the third edition of Bharat ko Janiye Quiz 2020-21 has been held virtually from 30 September to 28 December 2020.
- Fifteen winners of the Bharat ko Janiye Quiz will be announced during the PBD convention and will be invited for an India Tour (Bharat ko Janiye Darshan) after Covid.

International: India's response to S 301 Report of U.S. on Equalisation Levy

Relevance IN – Prelims (about Equalisation Levy + about the Special 301 Report) + Mains (GS II bilateral relations)

What's the NEWS

- The U.S. administration had announced initiation of investigation under section 301 of the U.S. Trade Act, 1974 against the taxation on digital services adopted or under consideration by countries, including the Equalisation Levy applied by India. Other countries under investigation include Italy, Turkey, and United Kingdom.
- With respect to India, the focus of the investigation was on the 2% Equalisation Levy (EL) levied by India on e-commerce supply of services.
- The U.S. investigation included whether the EL discriminated against the U.S. companies, was applied retrospectively, and diverged from U.S or international tax norms due to its applicability on entities not resident in India.

Equalization Levy

- In the absence of the EL, non-resident e-commerce operators (not having any Permanent Establishment in India but significant economic presence) are not required to pay taxes in respect of the consideration received in the e-commerce supply or services made in the Indian market.
- The EL levied at 2% is applicable on non-resident e-commerce operator, not having a permanent establishment in India.
- The threshold for this levy is Rs. 2 crores, which is very moderate and applies equally to all e-commerce operators across the globe having business in India.
- The levy applies equally to all non-resident e-commerce operators, irrespective of their country of residence.
- There is no retrospective element as the levy was enacted before the 1st day of April, 2020 which is the effective date of the levy.
- It does not have extra territorial application as it applies only on the revenue generated from India.
- The purpose of the Equalization Levy is to ensure fair competition, reasonableness and exercise the ability of governments to tax businesses that have a close nexus with the Indian market through their digital operations.
- It is a recognition of the principle that in a digital world, a seller can engage in business transactions without any physical presence, and governments have a legitimate right to tax such transactions.

The Special 301 Report

- The Special 301 Report is prepared annually by the Office of the United States Trade Representative (USTR) that identifies trade barriers to United States companies and products due to the intellectual property laws, such as copyright, patents and trademarks, in other countries.
- The USTR must identify countries which do not provide “adequate and effective” protection of intellectual property rights or “fair and equitable market access to United States persons that rely upon intellectual property rights”.
- The Special 301 Report is published pursuant to Section 301 of the Trade Act of 1974
- The annual Special 301 Report includes a list of “Priority Foreign Countries”, that are judged to have inadequate intellectual property laws; these countries may be subject to sanctions.
- In addition, the report contains a “Priority Watch List” and a “Watch List”, containing countries whose intellectual property regimes are deemed of concern.

Infrastructure Development: World Bank Signs \$105 Million Project to Improve Waterways in West Bengal

Relevance IN – Prelims (about the recent agreement -highlights) + Mains (GS II bilateral relations)

What's the NEWS

- The Government of India, the Government of West Bengal and the World Bank signed a \$105 million project to improve the inland water transport infrastructure in Kolkata, West Bengal.

Know! more about the project

- The West Bengal Inland Water Transport, Logistics and Spatial Development Project will facilitate passenger and freight movement across the Hooghly river; undertake spatial planning to improve accessibility in the Kolkata Metropolitan Area; enhance the quality of life of its residents; and contribute to the growth of the state's logistics sector.
- This Project will help improve the river transport infrastructure in West Bengal and help in the economic development of the state by connecting the hinterland with markets and job centers in Kolkata's Metropolitan Area".
- The project will cover the five most populous districts of southern West Bengal, including its urban agglomeration -- the Kolkata Metropolitan Area (KMA) where around 30 million people or one-third of West Bengal's population live.
- The Hooghly river, a distributary of the river Ganga, in Kolkata separates the Kolkata port from its large consumption centers, which are, its wholesale market and its vast hinterland comprising among others the entire North East of India and two landlocked neighboring countries namely, Nepal and Bhutan.
- More than 80 percent of freight and passenger traffic currently cross the river via Kolkata's three bridges.
- To curtail congestion, the city has restricted the movement of trucks to the port to certain bridges and only during limited hours, reducing access to the port and increasing the cost of logistics.
- The \$105 million loan from the International Bank for Reconstruction and Development (IBRD), has a maturity of 17 years, including a grace period of 7 years.

Economy: Liberalised MSME AEO Package

Relevance IN – Prelims (about Liberalised MSME AEO Package) + Mains (GS III Economic development + GS II government schemes and initiatives)

What's the NEWS

- Central Board of Indirect Taxes & Customs (CBIC) has taken a new initiative to introduce its flagship "Liberalised MSME AEO Package" for Micro Small and Medium Enterprises (MSMEs).
- In order to attract MSMEs to become Authorised Economic Operators (AEOs) and avail the various benefits, the CBIC has relaxed the compliance criteria provided the MSMEs have a valid certificate from their line-Ministry.
- The relaxed requirements allow MSMEs who have filed minimum 10 Customs clearance documents in one year and who have a clean compliance record over 2 years to apply for the scheme.

Liberalised MSME AEO Package

- CBIC's flagship "Liberalised MSME AEO Package" scheme is a voluntary compliance programme which enables swifter Customs clearance for accredited stakeholders in the global supply chain viz. importers, exporters, logistic service providers, custodians etc.
- The approved AEOs derive various benefits such as, *inter alia*, the facility of Direct Port Delivery (DPD) of imported containers, Direct Port Entry (DPE) of their Export Containers, high level of facilitation in customs clearance of their consignments thereby ensuring shorter cargo release time, exemption from Bank guarantees
- Another important benefit available to specified AEOs is that their payment of Customs duty is deferred and need not to be paid before the clearance of the imported goods by Customs.
- An added advantage for Tier 2 AEOs is that their exports to certain countries are accorded facilitation by the foreign Customs administration with whom India enters into a Mutual Recognition Agreement/Arrangement.
- Through "Liberalised MSME AEO Package", CBIC encourages all eligible MSMEs to avail advantages of faster Customs clearances and other related benefits.

Bilateral Relation: Cabinet approves signing of Memorandum of Cooperation between India and Japan on Partnership in "Specified Skilled Worker"

Relevance IN – Prelims (about Memorandum of Cooperation -highlights) + Mains (GS II bilateral relations)

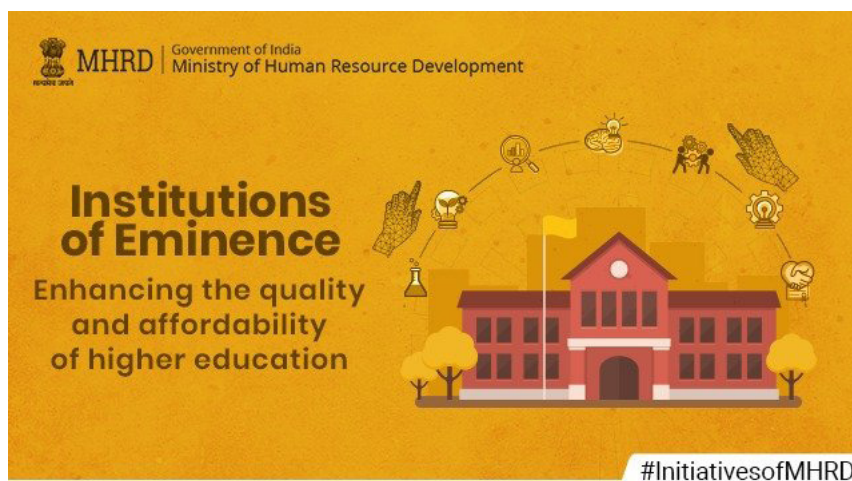
What's the NEWS

- The Union Cabinet, has approved the signing of a Memorandum of Cooperation between the Government of India and Government of Japan, on a Basic Framework for Partnership for Proper Operation of the System Pertaining to "Specified Skilled Worker".

Know! the important take outs

- The present Memorandum of Cooperation would set an institutional mechanism for partnership and cooperation between India and Japan on sending and accepting skilled Indian workers, who have qualified the required skill and Japanese language test, to work in fourteen specified sectors in Japan.
- These Indian workers would be granted a new status of residence of “Specified Skilled Worker” by the Government of Japan.
- Under this MOC, a Joint Working Group will be set up to follow up the implementation of this MOC.
- The Memorandum of Cooperation (MOC) would enhance people-to-people contacts, foster mobility of workers and skilled professionals from India to Japan.
- Skilled Indian workers from fourteen sectors viz. Nursing care; Building cleaning; Material Processing industry; Industrial machinery manufacturing industry; Electric and electronic information related industry; Construction; Shipbuilding and ship-related industry; Automobile maintenance; Aviation; Lodging; Agriculture; Fisheries; Food and beverages manufacturing industry and Food service industry would have enhanced job opportunities to work in Japan.

Education: UGC paves way for IoEs to set up campuses abroad



Relevance IN – Prelims (about the recent amendment + about Institutions of Eminence (IoEs) + Mains (GS II Issues relating to development and management of Social Sector/ Services relating to Health, Education, Human Resources.

What's the NEWS

- THE UNIVERSITY Grants Commission (UGC) has amended its regulations, allowing Institutions of Eminence (IoEs) to set up campuses abroad after receiving no objection certificates from the Ministry of External Affairs and Ministry of Home Affairs.
- The move is in line with the government's new National Education Policy, which says that high performing universities should be encouraged to set up campuses abroad.
- The amendments also permit the IOEs to start new off campus centres, with a maximum of three in five years and not more than one in an academic year.
- There are 18 Institutions of Eminence, including IIT-Delhi, IIT-Kharagpur, IIT-Madras and IIT-Bombay.

Amendments to the UGC (Institutions of Eminence Deemed to be Universities) Regulations, 2017.

- Institutions of Eminence Deemed to be Universities shall be allowed to start new off-shore campuses with the prior approval of the Ministry after receiving No Objection Certificate from Ministry of External Affairs and Ministry of Home Affairs
- The Institutions of Eminence Deemed to be Universities shall ensure that the norms and standards of the off shore campus shall be the same as that maintained on the main campus for similar courses, and the off-shore campus shall also follow similar admission criteria, curriculum, examination system and evaluation system.

Empowered Experts Committee

- The functioning of the off shore campuses shall be reviewed by an Empowered Experts Committee “independently and/or along with the IOE”.
- After review of the off shore campus, if the Empowered Experts Committee is not satisfied with the performance of the off shore campus, it may recommend discontinuation of the off shore campus to the Central Government.
- In such cases, the interest of the students enrolled at the off-shore campus shall be adequately protected by the Institution of Eminence Deemed to be University
- The IOEs have also been permitted to start an off campus centre on an interim campus “subject to the condition that the permanent campus shall be ready within a reasonable time period of not exceeding five years.”

Connect to the Past (April 2019)

20 Institution recommended for status of ‘Institutions of Eminence (IoE)’

Public institutions (5)

- Union Human Resource Development Ministry, following the recommendation from UGC, decided to grant Institution of Eminence status to five public institutions.
- The public institutions on the list will then be eligible for a Government grant of Rs. 1,000 Cr spread over 5-years.
- They are required to sign a Memorandum of Understanding with the Ministry, laying out their plans to achieve the objective of becoming world class institutions.

Private institutions (5)

- Letter of Intent has also been sent to five private institutions for the IoE status.
- Government do not give any financial support to them.
- Six Institutions that were granted Institutions of Eminence Status in 2018
- Public Institutions – Indian Institute of Science, IIT Bombay, IIT Delhi
- Private Institutions – Birla Institute of Technology and Science, Manipal academy of Higher education, Jio Institute

10 Institutions granted Institution of Eminence Status in 2019

- Public Institution – IIT Madras, IIT Kharagpur, Banaras Hindu University, University of Hyderabad, University of Delhi
- Private Institutions – Amrita Vishwa Vidyapeetham, Vellore Institute of Technology, Kalinga Institute of Industrial Technology, Bharti Institute (Satya bharti foundation Mohali) – These Private institutes will need to submit their readiness for commencing academic operations as IoEs

4 Institutes have to fulfil certain technical aspects

- Public Institutions - Jadavpur University (West Bengal) and Anna University (Tamil Nadu) – the Tamil Nadu and West Bengal governments must commit themselves to contributing half of the funds required for Anna University and Jadavpur University respectively
- Private Institutions – Shiv Nadar University and O.P Jindal global university – letters were issued to the state governments to pass legislation in the state assembly to cease the status of these universities as private Universities so as to enable them to be considered as Deemed University

Institutions of Eminence (IoE) – Salient Features

- Government Institutions to get additional funding up to Rs. 1,000 Cr.
- They will have complete academic and administrative autonomy.
- They will have complete financial autonomy to spend the resources raised and allocated, subject to general conditions and restrictions.
- Academic collaboration with foreign higher educational institutions (in top 500) would be exempt from Government approvals.
- Freedom to hire personnel from industry.
- Freedom to recruit faculty from outside India (with limit of 25% of faculty strength).
- Freedom to enter into academic collaborations with other Institutions within the country.

- Freedom to have own transparent merit based system for admission of students.
- Freedom to admit additionally foreign students on merit subject to a maximum of 30% of the strength of admitted domestic students.
- Freedom to fix and charge fees from foreign students without restriction.
- Freedom to fix the domestic student fees, subject to the condition that no student, who gets admission is turned away for lack of finance. Every
- Institute to encourage scholarships and extension of loans facility.
- Freedom to offer courses within a program, as well as to offer degrees in newer areas, including inter-disciplinary ones.
- Freedom to have the flexibility of course structure in terms of number of credit hours.
- Flexibility in fixing of curriculum and syllabus, with no UGC mandated curriculum structure.
- Freedom to offer online courses as part of their programmes with a restriction that not more than 20% of the programmes should be in online mode.
- Students enrolment capacity to be 10,000 in 15 years.
- Faculty-Student Ratio should be 1:20 at the time of Notification and should increase to 1:10 in five years.
- UGC Inspections shall not apply to Institutions of Eminence.

Governance: Single Window Clearance Portal of Ministry of Coal launched



Relevance IN – Prelims (about Single Window Clearance Portal) + Mains (GS II good governance + transparency and accountability)

What's the NEWS

- Ministry of Coal launched Single Window Clearance Portal, a unified platform that facilitates grant of clearances and approvals required for starting a coal mine in India.

Single Window Clearance Portal

- 19 successful bidders have been allotted mines under the country's first commercial coal mining auction.
- This will give the states an estimated revenue of about Rs 6,500 crore per year and will also create more than 70,000 jobs.
- The next tranche of commercial mines auction would be launched in January 2021.
- Single Window Clearance Portal is in the spirit of Minimum Government and Maximum Governance.
- It would be a milestone for Ease of Doing Business in the Indian Coal Sector

Know! the benefits of unified platform

- Presently, about 19 major approval or clearances are required to be obtained before starting a coal mine in the country.
- These approvals or clearances are granted either by central or state governments.
- In the absence of a unified platform for grant of clearances/approvals for starting of a coal mine, the project proponents are required to approach different administrative ministries and Government departments separately to apply for the requisite clearances leading to delay in operationalization of coal mines.
- Now, the complete process shall be facilitated through Single Window Clearance Portal, which will map not only the relevant application formats, but also process flow for grant of approval or clearances.
- The success of India's first ever commercial mining auctions will pave the way for the Aatmanirbhar Bharat as it will help reduce India's coal import by about 20%.
- SBI Capital Markets Limited, sole Transaction Advisor to Ministry of Coal for the Commercial coal mine auction, had devised the methodology and assisted Ministry in conduct of the auction.
- States will garner a total revenue of Rs 6,656 crores annually from these successfully auctioned 19 mines.
- These mines are spread over 05 states Madhya Pradesh, Chhattisgarh, Odisha, Jharkhand and Maharashtra and have consolidated Peak Rated Capacity (PRC) of 51 Million Tonnes Per Annum (MTPA).

National: The North East Venture Fund (NEVF) is gaining popularity among Start-Ups and young entrepreneurs

Relevance IN – Prelims (about North East Venture Fund (NEVF) + NEDFi + Mains (GS II government policies and interventions)

What's the NEWS

- The North East Venture Fund (NEVF), which is the first and the only dedicated Venture Fund for the North Eastern Region is gaining popularity among Start-Ups and young entrepreneurs.
- The Venture Fund Scheme launched by the Ministry of Development of North Eastern Region (DoNER) intended to promote growth of business ventures and skill development in the region.

Know! about North East Venture Fund (NEVF) and its benefits

- The Ministry of DoNER had joined with North Eastern Development Finance Corporation Ltd (NEDFi) to set up the North East Venture Fund, the first and the only Venture Fund for Northeast with an initial corpus of Rs. 100 crores.
- The fund targets to invest in Start-Ups and unique business opportunities to provide resources for new entrepreneurships.
- The main focus of North East Venture Fund (NEVF), is for mostly the enterprises involved in Food Processing, Healthcare, Tourism, segregation of services, IT, etc.
- The Venture Fund Scheme which was launched with the initial motivation to provide livelihood to youth of the North Eastern region, has now also started attracting different groups of youths from diverse backgrounds who wish to try their fortunes through the unexplored potentials of the North Eastern region.
- The investment size with the Venture Fund Scheme ranges between Rs.25 lakhs and Rs. 10 crores with a long term horizon of five to ten years
- The Ministry of North Eastern Region has started the series "Destination North East ", wherein the different facets of Northeast including the entrepreneurship avenues are replicated at different locations across the country.
- During these events also, an exclusive arrangement is made for offering counselling and assistance to potential entrepreneurs and business Start-Ups.

Know! about NEDFi

- The North Eastern Development Finance Corporation Ltd (NEDFi) is a Public Limited Company registered under the Companies Act 1956 on 9th August, 1995.
- It is notified as a Public Financial Institution under Section 4A of the said Act and was registered as an NBFC in 2002 with RBI.

- The shareholders of the Corporation are IDBI, SBI, LIC, SIDBI, ICICI, IFCI, SUUTI, GIC and its subsidiaries.
- The management of NEDFi has been entrusted upon the Board of Directors comprising representatives from shareholder institutions, DoNER, State Governments and eminent persons from the NE Region and outside having wide experience in industry, economics, finance and management.
- NEDFi provides financial assistance micro, small, medium and large enterprises for setting up industrial, infrastructure projects in the North Eastern Region of India and also Microfinance through MFI/NGOs.
- Besides financing, the Corporation offers Consultancy & Advisory services to the state Governments, private sectors and other agencies.

International: The 25th Amendment

Relevance IN – Prelims (all about the 25th amendment of American constitution)

What's the NEWS

- *The Democratic-controlled US House of Representatives, has passed a resolution urging Vice President Mike Pence to invoke 25th Amendment to remove the president from office*
- The 25th Amendment, adopted more than 50 years ago in the wake of President John F Kennedy's assassination, provides a mechanism for the succession of the president for his or her replacement in the event he or she proves unfit to serve.
- Most Recently, President George Bush twice invoked the 25th Amendment to temporarily transfer the powers of the presidency to Vice President Dick Cheney in 2002 and again in 2007.
- Under the amendment, the vice president and a majority of either the Cabinet or some other body designated by Congress may remove the president from office.

25th Amendment

- It is an effort to resolve some of the continuing issues revolving around the office of the President if the President becomes disabled to fulfill his responsibilities

Know! all about the 25th Amendment

- In the aftermath of a violent mob invading the US Capitol building, that houses both the US Senate as well as the House of Representatives, there are calls to invoke the disability clause under section 4 of the 25th Amendment for Sitting President Trump to be stripped of his power from office.
- The 25th Amendment has four sections providing the procedures for replacing or succeeding the President or Vice President in the event of death, removal, resignation, illness or incapacitation

SECTION 1

- In case of the removal of the President from office or his death or resignation, the Vice President shall become President, prohibiting the departing president from returning to office.

SECTION 2

- Addresses vacancies in the office of the Vice President, then the President shall nominate a Vice President who shall take office upon confirmation by a majority vote of both Houses of Congress.

SECTION 3

- If the President is able to declare his/her inability with written declaration that he is unable to discharge the powers and duties of his office then the Vice President takes over as the Acting President.

Removing Trump with the 25th Amendment



Vice-President Mike Pence and the majority of Trump's cabinet would have to come together and declare him unfit.

Pence would take over as president.



If Trump insists he's still fit to govern, Pence and the cabinet have two options.

They can either back off, in which case Trump would regain power, or take it to Congress to vote.



In this case, Pence would remain as president until the Congress vote is decided.

Two-thirds of Congress would have to vote to invoke the 25th Amendment.

If the vote passes, Trump would be removed and Pence would take over.



SECTION 4

- Addresses a situation in which the Vice President and a majority of the Cabinet determine that the President is unable to discharge his duties. Then the Vice President immediately assumes the powers and duties of the office as Acting President.

Section 4 - The Disability Clause under 25th Amendment

- That process ultimately requires a two-thirds vote of both houses of Congress. (While President can be impeached by a simple majority in the House and removed by a two-thirds vote in the Senate)
- The President can claim that no inability exists that Congress shall decide finally.
- However, the fourth section of the 25th Amendment has never been invoked.

Education: NIC and CBSE to launch CollabCAD Software

Relevance IN – Prelims (about CollabCAD Software + CollabCAD 3D Design Challenge) + Mains (GS II Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.+ GS III awareness in the field of science and technology)

What's the NEWS

- National Informatics Centre (NIC), MeitY along with Central Board of Secondary Education (CBSE), Ministry of Education is jointly launching CollabCAD Software, a collaborative network, computer-enabled software system, providing a total engineering solution from 2D drafting & detailing to 3D product design for students and faculty of Engineering Graphics Curriculum.

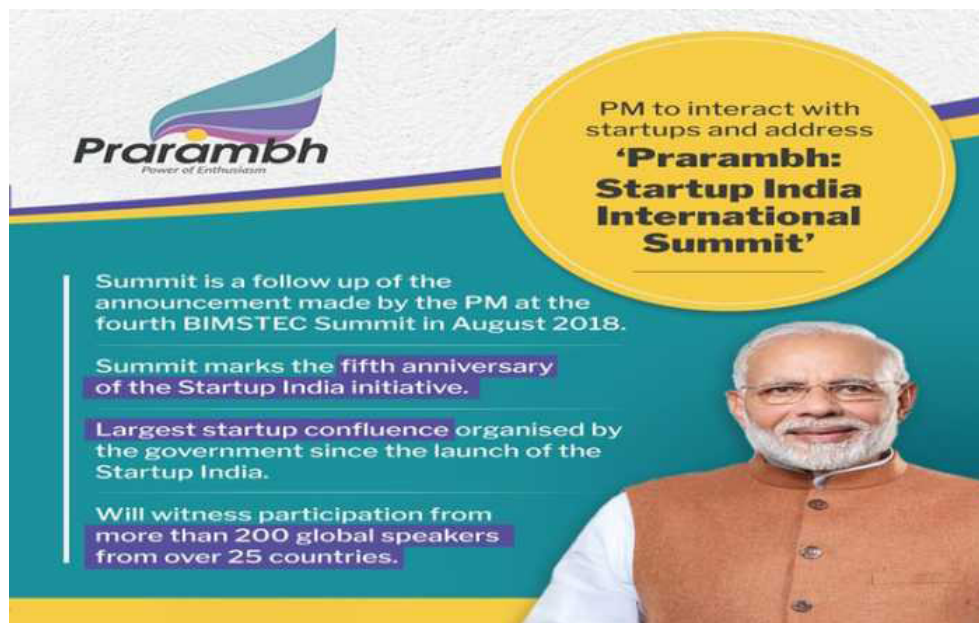
Know! all about CollabCAD Software

- National Informatics Centre (NIC), CBSE, and Atal Innovation Mission (AIM), NITI Aayog will also jointly release a comprehensive e-book on CollabCAD 3D modeling.
- This e-book 1.0 is ready for public release through the CollabCAD portal and will guide CAD students, beginners, and professionals in understanding and using CollabCAD Software.
- It is designed and authored by the CollabCAD Group of NIC, New Delhi.
- This initiative aims to provide a great platform to students across the country to create and modify 3D digital designs with a free flow of creativity and imagination.
- This software would also enable students to collaborate over designs across the network and concurrently access the same design data for storage and visualization.
- CBSE will introduce CollabCAD Software for Engineering Graphics (Subject Code 046) at the Senior School Level for Class XI and XII.
- CollabCAD software will be used for Practical assignments as part of the subject curriculum for making different types of 3D designs and 2D Drawings.
- Students from around 140 plus schools across the country and the schools in the Middle East (affiliated with CBSE, New Delhi) will have access to this software which can be used for practical projects and understanding concepts of Engineering Graphics.
- NIC and CBSE will be signing an MOU for 'CollabCAD Software Support and Training for Students and Faculty of Engineering Graphics in CBSE affiliated Schools' for a period of 10 years
- This MOU aims to develop human resources and skills around CollabCAD software and popularize CollabCAD among the students and faculty.

Tinker from Home campaign

- Atal Innovation Mission (AIM), Niti Aayog jointly launched CollabCAD on 13th April 2020 concurring with Atal Tinkering Labs (ATL) Community Day.
- It was launched in tune with the requirements of the 'Tinker from Home' campaign for students of 5,000 plus schools across the country.
- CollabCAD 3D Design Challenge was announced by AIM two days after the launch for students to create 3D digital models using CollabCAD geometric modules.

Government Schemes: Prarambh: Startup India International Summit



Relevance IN – Prelims (about Prarambh + summit highlights + about Start up India and Startup India seed fund) + Mains (GS II government policies and interventions)

What's the NEWS

- The two day 'Prarambh', Startup India International Summit begin in New Delhi with members of BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) countries participating in the inaugural event.
- The Summit is being organizing by Department for Promotion of Industry and Internal Trade, M/o Commerce & Industry, as a follow up of the announcement made by the Prime Minister Shri Narendra Modi at the 4th BIMSTEC Summit held in Kathmandu in August, 2018.
- BIMSTEC, or the Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation, is a grouping of countries in south Asia and Southeast Asia – Bangladesh, India, Myanmar, Sri Lanka, Thailand, Bhutan and Nepal.
- The Summit is a demonstration of neighbourhood first policy which will booster partnership among the member countries.

Know! the summit highlights

- More than 25 countries and 200 global speakers are to participate in the Summit.
- The Summit is having 24 sessions with focus on enhancing multilateral cooperation and engagement with the countries from around the global to collectively develop and strengthen the Startup ecosystem.
- The main objective of the Summit is to focus attention of global capital for startups in India, provide opportunities for accessing International markets to the startups in the country, mobilize domestic capital and evolve enabling policy provisions.
- The Summit is the largest Startup India International Summit organized by the Government of India since the launch of the Startup India Initiative in 2016.

Know! about Indian startup and steps taken by the government

- Indian startup ecosystem has made big progress in the last five years since the launch of Startup India.
- India has over 41,000 startups registered with the Government but there are many more who are working at the grassroots level and doing a good work.
- India today is one of the biggest nations in the start-up ecosystem with more than 41,000 start-ups who are involved in one mission or the other in the country with nearly 5,700 in the IT sector, 3,600 in the health sector and 1,700 startups in agriculture.

- The Startup India initiative was launched in 2016 to promote and support the startup in India by providing bank finances.

Startup India seed fund

- Prime Minister Narendra announced a seed fund worth Rs 1,000 crore for startups to provide them with initial capital to start and grow their business, and said that guarantees would be given to help them raise debt capital going ahead.
- In order to provide initial capital to startups, the country is launching a Startup India seed fund worth Rs 1,000 crore. This will help to start and grow new startups,
- Through the Fund of Funds, startups are already receiving assistance to raise equity capital and going forward, the government will also help startups to raise debt capital by providing guarantees.
- The government is trying to create a startup system which is based on the mantra 'of the youth, by the youth, for the youth',

Know! about Startup India

- It is a flagship initiative of the Government of India, intended to build a strong eco-system for nurturing innovation and Startups in the country that will 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 Action Plan that addresses all aspects of the Startup ecosystem has been announced.

With this Action Plan the Government hopes to accelerate spreading of the Startup movement:

1. From digital/ technology sector to a wide array of sectors including agriculture, manufacturing, social sector, healthcare, education, etc.; and
2. From existing tier 1 cities to tier 2 and tier 3 cities including semi-urban and rural areas.

The Action Plan is divided across the following areas:

1. Simplification and Handholding
2. Funding Support and Incentives
3. Industry-Academia Partnership and Incubation
4. Highlights of the action plan

Miscellaneous: At 18 million, India has largest diaspora in the world: UN

Relevance IN – Prelims (about International Migration 2020 Highlights) + Mains (GS II role of Indian Diaspora)

What's the NEWS

- India has the largest transnational population in the world.
- It has the most migrants abroad -- 18 million, which is a significant number and another feature which is very interesting about the Indian migrant population is that they're really distributed all over the globe
- It has been released by the Population Affairs Officer in the Population Division at UN Department of Economic and Social Affairs (UN DESA)

International Migration 2020 Highlights'

- The report, 'International Migration 2020 Highlights', by the Population Division of UN DESA, released on Friday said in 2020, 18 million persons from India were living outside of their country of birth.
- The Indian diaspora, one of the most "vibrant and dynamic", is the largest in the world, with 18 million people from the country living outside their homeland in 2020, the UN has said.
- The United Arab Emirates, the US and Saudi Arabia host the largest numbers of migrants from India
- The Indian diaspora is present in all continents and regions -- from the Gulf to Northern America to Australia, UK. It's a very vibrant" and dynamic diaspora in the world, she said.
- The report, 'International Migration 2020 Highlights', by the Population Division of UN DESA, released said in 2020, 18 million persons from India were living outside of their country of birth.

- Other countries with a large diaspora included Mexico and Russia (11 million each), China (10 million) and Syria (8 million).
- The report said India's large diaspora is distributed across a number of major countries of destination, with the UAE (3.5 million), the US (2.7 million) and Saudi Arabia (2.5 million) hosting the largest numbers of migrants from India.
- Other countries hosting large numbers of migrants from India included Australia, Canada, Kuwait, Oman, Pakistan, Qatar and the UK.
- Between 2000 and 2020, the size of the migrant population abroad grew for nearly all countries and areas of the world.
- India experienced the largest gain during that period at nearly 10 million, followed in order of magnitude by Syria, Venezuela, China and the Philippines.
- Migration from India is largely motivated by labour and family reasons
- Forced displacement is a much smaller category (about 10 per cent) in the total.
- The Indian diaspora is comprised predominantly of persons who are working, but also students and people who moved for family reasons.
- The US remained by far the largest country of destination of international migrants with 51 million migrants in 2020, equal to 18 per cent of the world's total.
- Germany hosted the second largest number of migrants worldwide at around 16 million, followed by Saudi Arabia (13 million), Russia (12 million) and the UK (9 million).
- In terms of regional migration corridors, between 2000 and 2020, some regional migration corridors grew very rapidly.
- The corridor Central and Southern Asia to Northern Africa and Western Asia grew the most, with 13 million migrants added between 2000 and 2020; more than tripling in size.
- The majority of that increase resulted from labour migration from Bangladesh, India, Pakistan, Nepal and Sri Lanka to the countries of the Gulf Cooperation Council (GCC)
- The report said according to World Bank projections, the Covid-19 pandemic may reduce the volume of remittances sent to low-and middle-income countries from USD 548 billion in 2019 to USD 470 billion in 2021, a decline of 14 per cent.
- India is the main country of recipient of remittances worldwide and in 2019 received USD 83 billion in remittances from its diaspora.
- The World Bank projects that in 2020, the amount will decline by around 9 per cent to about USD 76 billion.

Bilateral Relations: Cabinet approves MoU between India and UAE for Scientific and Technical Cooperation

Relevance IN – Prelims (about Memorandum of Understanding (MoU) on Scientific and Technical Cooperation – highlights) + Mains (GS II bilateral relations + GS III disaster management) – can be used to substantiate questions related to disaster management and regional collaboration to mitigate the menaces of adverse weather

What's the NEWS

- The Union Cabinet, has given its approval to the Memorandum of Understanding (MoU) on Scientific and Technical Cooperation between National Centre of Meteorology (NCM), United Arab Emirates (UAE) and Ministry of Earth Sciences (MoES) India.

The MoU provides for sharing of knowledge, data and operational products for meteorological, seismological and oceanic services, such as Radar, Satellite, Tide gauges, seismic and Meteorological stations.

1. Exchange of experience/visits in term of scientists, research scholars and specialists, etc. for the purpose of research, training, consultation, focused on climatic information services, satellite data utilization for now casting and tropical cyclones forecasting.
2. Organization of bilateral scientific and technical seminars/ workshops/ conferences and training courses on problems related to the fields of cooperation mentioned in the MoU and of interest to both countries.

3. Deployment of **Meteorological observation networks** on mutual agreement over Ocean waters.
4. Cooperation in the development of special capacities of Tsunami models researches for faster and more reliable forecasts of **Tsunamis propagating through the Oman Sea and Arabian Sea** which affect the coastal areas of India and North East of UAE.
5. Cooperation to support the **Tsunami Early Warning Centre (TEWC)** in the form of forecast modelling software, specifically designed to support the Tsunami forecasting operations.
6. Sharing the real-time seismic data of some of Seismic stations situated in south and west of India and North of the UAE for monitoring the seismic activities which may generate Tsunami in Arabian Sea and Sea of Oman.
7. Cooperate at the field of Seismology which includes the study of Seismic activities having the potential to generate Tsunami waves **in Arabian Sea and Oman Sea**.
8. Cooperation in Early warnings of Sand and Dust storms through the exchange of knowledge.

Importance of regional collaboration in understanding changing weather

- Weather services make critical contributions in enhancing efficiency of weather dependent sectors of economy; and in managing risk in weather-dependent economic sectors such as agriculture, transport, water etc. which underpin the economic growth in the region.
- Resilience can be strengthened through regional and global cooperation as countries invest in early warning systems and modernize weather and forecasting services.
- Due to evolutionary nature of weather, regional collaboration can help improve understanding of changing weather patterns, devise effective response strategies, lower investment costs, and foster regionally relevant technological innovation and address challenges related to modernization and sustainability of weather services.
- Collaborative participation within MoES (India) and NCM-UAE in terms of activities related to multi-hazard early warning system and climate resilience can significantly contribute to economic growth in the region.

Bilateral Relations: Government of India supplied two Mobile Harbour Cranes (MHC) to strengthen cargo handling capacity of Chabahar Port, Iran



Relevance IN – Prelims (about Chabahar port and significance of it – strategic location) + Mains (GS II bilateral relations)

What's the NEWS

- India has supplied a consignment of two Mobile Harbour Cranes (MHC) to Iran's Chabahar port, with a total contract value of over USD 25 Million under a contract agreement for supply of 6 MHC.

Know! the benefits of MHC

- The consignment of cranes arrived from Marghera port, Italy has been unloaded successfully on 18th January, 2021 at Chabahar port and presently undergoing trials run.
- With 140 metric tons lifting capacity, multipurpose equipment and accessories like Mobile Harbour Cranes (MHC) will enable India Ports Global Limited (IPGL) to provide seamless services for Container, Bulk and General Cargo at Shahid Beheshti Port of Chabahar.

- This is a step towards India's commitment towards infrastructure development of Shahid Beheshti Port of Chabahar.
- The bilateral contract between the Islamic Republic of Iran and Republic of India was signed on 23rd May 2016 with a total value of USD 85 million for Equipping, Mechanizing and starting Operations at Shahid Beheshti Port of Chabahar development Phase- I.
- To achieve this ambitious aim, an SPV namely India Ports Global Limited (IPGL) Mumbai was incorporated under the ambit of the Ministry of Ports, Shipping and Waterways.

Know! the importance of Chabahar Port

- It is a strategic port with great national importance.
- Chabahar port provide access to markets in Central Asia.
- The location of Chabahar Port has strategically advantage and high potential to provide connectivity among India, Iran, Afghanistan, Uzbekistan and other CIS countries specially Eastern CIS countries to increase trade between these countries.

Know! about Chabahar Port

- It is a city and capital of Chabahar County, Sistan and Baluchestan Province, Iran.
- It is a free port (Free Trade Zone) on the coast of the Gulf of Oman, and is Iran's southernmost city.
- The sister port city of Gwadar in Pakistan's Balochistan Province is about 170 kilometres (110 mi) to the east of Chabahar.
- Chabahar is situated on the Makran Coast of the Sistan and Baluchestan province of Iran and is officially designated as a Free Trade and Industrial Zone by Iran's government.
- Due to its free trade zone status, the city has increased in significance in international trade.
- The overwhelming majority of the city's inhabitants are ethnic Baluch of Iran, who speak their native Baluchi language in addition to Persian.
- The Chabahar port, considered a gateway to golden opportunities for trade by India, Iran and Afghanistan with central Asian countries, is located on the Indian Ocean in the Sistan and Baluchistan province of Iran.
- The port, which is easily accessible from India's western coast, is increasingly seen as a counter to Pakistan's Gwadar Port which is being developed with the Chinese investment.
- In May 2016, India, Iran and Afghanistan inked a pact which entailed establishment of Transit and Transport Corridor among the three countries using Chabahar port as one of the regional hubs for sea transportation in Iran, besides multi-modal transport of goods and passengers across the three nations.



Social Issues: TRIFED Exchanges MoU with IFFDC to Promote Livelihood Generation of Tribal People

Relevance IN – Prelims (about the MoU – highlights + about IFFDC + about TRIFED) + Mains (GS II government policies and interventions for the vulnerable section of population)

What's the NEWS

- TRIFED, as the nodal agency working for the empowerment of tribals, is focusing its efforts on finding new ways to improve the lives and the livelihoods of the tribal people.
- As a part of its continued efforts, TRIFED has been partnering with like-minded organisations to create synergies together.

Know! more about the MoU (highlights)

- TRIFED and Indian Farm Forestry Development Co-operative Ltd (IFFDC) have entered into a Memorandum of Understanding (MoU) to work together for tribal livelihood generation.

- The two organizations have agreed to partner with each other to organise training programmes for tribal artisans in the area of entrepreneurship skill and business development.
- They will also collaborate further to identify and implement CSR initiatives and tribal development efforts.
- Other areas of association have been identified through which IFFDC promoted PFFCS/SHGs/CBOs will be linked with TRIFED for collection and marketing of NTFPs/MFPs.
- IFFDC will also assist in promoting tribal FPOs and will provide trainings to TRIFED promoted/linked Community Organisations/Members.
- The scope of the agreement will also include any other activity that can be taken up to strengthen tribal livelihoods and entrepreneurship development.

Know! about IFFDC

- Indian Farm Forestry Development Cooperative Limited (IFFDC) came into existence formally in 1993 although its work had begun in 1986-87.
- Its promoter, Indian Farmers Fertiliser Cooperative Limited (IFFCO), had launched programmes of eco-restoration and wasteland development through farm forestry in the states of Uttar Pradesh, Madhya Pradesh and Rajasthan and these programmes were subsequently handed over to the IFFDC for being scaled up and integrated with rural livelihood development and poverty alleviation programmes in the country.
- IFFDC has diversified its portfolio and has broadened its focus to include in addition to Farm Forestry and Climate Change, activities such as Watershed Management, Climate Proofing, Nutritional and Economic Security, Livelihoods, CSR initiative, Cross Cutting Interventions, Seed Production and Agri-Input Supply etc.
- This has been done by adopting approaches that are participatory in nature and designed to cater to the emerging and evolving needs of the community.
- With its presence in more than 9,514 villages across 19 States covering all the agro-climatic zones, it has so far implemented rural development projects worth more than Rs. 300 crore.
- With the objective to increase crop production & productivity, IFFDC is also undertaking Seed Production and Marketing Programme to provide quality seed and also supplying quality agri-inputs to farmers.
- IFFDC was registered on 22nd October, 1993 by the Department of Agriculture & Cooperation, Ministry of Agriculture, Government of India as a Multi-State Cooperative Society under the Multi-State Cooperative Societies (MSCS) Act, 1984 (subsequently under the MSCS Act 2002)
- Indian Farmers Fertiliser Cooperative Ltd. (IFFCO), National Co-operative Development Corporation (NCDC), State Cooperative Federations, Primary Farm Forestry Co-operative Societies (PFFCS) and Primary Livelihood Development Cooperative Societies (PLDCS) are members of the IFFDC.

Social Issues: KVIC to sign two MOUs with Ministry of Tribal Affairs aimed at creating local employment, strengthen Khadi artisans and the tribal population

Relevance IN – Prelims (about the MoUs – highlights + about NSTFDC + about PMEGP)) + Mains (GS II Mains (GS II government policies and interventions for the vulnerable section of population)

What's the NEWS

- The Khadi and Village Industries Commission (KVIC) and the Ministry of Tribal Affairs will sign two MoUs.

Know! the highlights

- While one MOU is regarding the purchase of Khadi fabric for tribal students, the other MOU is on partnering of Tribal Affairs Ministry with KVIC as an implementing agency for Prime Minister Employment Generation Program (PMEGP).
- As part of the first MoU, the Ministry of Tribal Affairs will procure over 6 lakh meters of Khadi fabric worth Rs 14.77 crore in 2020-21, for the students in Eklavya Residential Schools being run by the ministry.
- As the government increases the number of Eklavya Schools every year; the quantum of purchase of Khadi fabric shall also increase proportionally.

- Under the second MoU, National Scheduled Tribe Finance Development Corporation (NSTFDC), an agency of the Tribal Affairs Ministry responsible for economic development of tribals in India, will be roped in as a partner to implement PMEGP Scheme.
- NSTFDC provides concessional loan schemes for funding entrepreneurial ventures of aspiring scheduled tribes in all sectors of economy.
- The MoU will thus benefit the tribals by engaging them in various production activities and creating self-employment opportunities.
- The alliance of NSTFDC and KVIC will increase the coverage of PMEGP Scheme among the STs.

Know! the terms associated

Prime Minister's Employment Generation Programme (PMEGP)

- It is a credit-linked subsidy programme introduced by the government of India in 2008.
- PMEGP is a merger of two schemes, namely, Prime Minister's Rojgar Yojna and Rural Employment Generation Programme.
- This program focuses on generating self-employment opportunities through micro-enterprise establishments in the non-farm sector by helping unemployed youth and traditional artisans.
- The Ministry of MSME administers the Prime Minister's Employment Generation Programme (PMEGP).
- The PMEGP Scheme is being implemented by Khadi and Village Industries Commission (KVIC) at the national level.
- At the State level, the Scheme is being implemented through State Khadi and Village Industries Commission Directorates, State Khadi and Village Industries Boards and District Industries Centres and banks.

Objectives

- Generation of sustainable and continuous self-employment opportunities in urban and rural areas of the country
- Providing sustainable and continuous employment to a large segment of rural and urban unemployed youth, traditional and prospective artisans through the establishment of micro-enterprises
- Facilitating the financial institution's participation for higher credit flow to the micro sector

Eligibility

- Individuals with age of 18 years or more
- Passing standard VIII is required for a project above Rs 5 lakh in the service sector and above Rs 10 lakh in the manufacturing sector
- Institutions registered under Societies Registration Act- 1860
- Production based co-operative societies
- Self-help groups and charitable trust

Salient features of the scheme

- The Scheme is implemented through Khadi and Village Industries Commission, State Khadi and Village Industries Commission Directorates, State Khadi and Village Industries Boards and District Industries Centres and banks in Urban and Rural areas in the ratio of 30:30:40 between Khadi and Village Industries Commission / Khadi and Village Industries Boards / DIC respectively

National Scheduled Tribes Finance and Development Corporation (NSTFDC)

- It is an apex Organization under the Ministry of Tribal Affairs in 2001 was brought into existence with the sole aim of economic upliftment of the Scheduled Tribes in the country by way of extending concessional financial assistance to the target group under its various schemes.
- The prominent schemes of NSTFDC are Term Loan, Adivasi Mahila Sashaktikaran Yojana – an exclusive scheme for Scheduled Tribe women, Adivasi Shiksha Rinn Yojana – Education Loan scheme, Micro Credit Scheme for Self Help Groups (SHGs) – comprising Scheduled Tribes as its members, Tribal Forest Dwellers Empowerment Scheme and Teak Growers Scheme.

Bilateral Relations: First India-EU IPR dialogue

Relevance IN -Prelims (all about the 1st India-EU IPR dialogue – highlights) + Mains (GS II bilateral relations + GS III issues relating to intellectual property rights).

What's the NEWS

- The 1st India-EU IPR dialogue was held between the EU Commission and Department for Promotion of Industry and Internal Trade (DPIIT) through a virtual platform.

India-EU IPR dialogue (highlights)

- The aim of the dialogue was to further strengthen the India-EU relation & facilitate enhanced cooperation in the field of Intellectual Property Rights.
- The India Co-Chair provided an overview of various IPR developments, with an aim to meet the objectives set forth in the National IPR policy 2016.
- He also reiterated importance of legislative reforms brought in by India to stimulate innovation and creativity among start-ups and MSMEs.
- Various initiatives taken up by the Indian government in this context were appreciated by EU representatives.
- The EU Co-Chair provided brief overview of DG trade and the various activities being undertaken by them including IPRs in relation to Free Trade Agreements as well as effective enforcement of Intellectual Property Rights.
- Representative from EU provided an update on a recent directive on Copyright in the digital market keeping in pace with changing demands of industry.
- On Trademark, they presented the details about the dual system available in the region which provides flexibility to the owners.

NITI Aayog: NITI Aayog Releases Second Edition of India Innovation Index

Relevance IN – Prelims (about India Innovation Index – highlights + Institute for Competitiveness + Mains (GS II Centre- State relations + good governance)

What's the NEWS

- NITI Aayog, along with the Institute for Competitiveness, released the second edition of the India Innovation Index in a virtual event.
- The report examines the innovation capabilities and performance of the states and union territories. The first edition of the index was launched in October 2019.

Know! about the Index

- The states and union territories have been divided into 17 'Major States', 10 'North-East and Hill States', and 9 'City States and Union Territories', for effectively comparing their performance.
- The states and union territories have been ranked on two broad categories: outcome and governance.
- Overall, the framework of India Innovation Index 2020 consists of 36 indicators, which include hard data (32 indicators) and four composite indicators.
- India Innovation Index 2020 builds on the previous year's methodology by introducing more metrics and providing a holistic outlook of the Indian innovation ecosystem.
- The framework has been updated to include globally considered parameters for measuring innovation (such as the percentage of gross domestic product spent on research and development), while also retaining the parameters specific to the Indian economy.



- The index captures the trends and provides detailed analyses of the various factors that drive innovation at the country, state, and district levels.
- It is believed that these analyses would enable policymakers in identifying catalysts and inhibitors of innovation at the national and sub-national levels.
- The states and union territories have been divided into 17 'Major States', 10 'North-East and Hill States', and 9 'City States and Union Territories', for effectively comparing their performance.
- The states and union territories have been ranked on two broad categories: outcome and governance.
- Overall, the framework of India Innovation Index 2020 consists of 36 indicators, which include hard data (32 indicators) and four composite **indicators**.

India Innovation Index (Highlights)

- In the second edition too, the index found that the level of competitiveness among the states and union territories was high, which is essential for them to continually improve on their enabling factors as well as innovation performance, year by year.
- In the 'Major States' category, Karnataka continued to occupy the top position, while Maharashtra moved past Tamil Nadu to reach the second place.
- Telangana, Kerala, Haryana, Andhra Pradesh, Gujarat, Uttar Pradesh and Punjab completed the top ten in that order.
- Karnataka's rank is attributable to its substantive number of venture capital deals, registered geographical indicators and information and communications technology exports.
- Karnataka's high Foreign Direct Investment (FDI) inflow has also enhanced the innovation capabilities of the state. Four southern states—Karnataka, Tamil Nadu, Telangana and Kerala—occupied the top five spots under the 'Major States' category this year.
- Overall, Delhi retained its first rank, while Chandigarh made a big leap since 2019 and landed in the second place this year.
- Under the 'North-Eastern/Hill States' category, Himachal Pradesh moved up from the second position to emerge as the top ranker this year, while 2019's top performer (in this category), Sikkim, slipped down to the fourth position.
- The innovation inputs were measured through five enabler parameters, and the output through two performance parameters.
- While 'Human Capital', 'Investment', 'Knowledge Workers', 'Business Environment', 'Safety and Legal Environment' were identified as enabler parameters, 'Knowledge Output' and 'Knowledge Diffusion' were chosen as the performance parameters.

Know! the benefits of India Innovation Index

- The India Innovation Index will create synergies between different stakeholders in the innovation ecosystem, thus enabling India to shift to competitive good governance.'
- The index is a great beginning to improve the innovation environment in the country. It is the right step towards making India the innovation leader of the world.
- The index could be of vital significance to the states in identifying their innovation performance and initiating necessary policy interventions to leverage their unique strengths
- NITI Aayog, with its mandate of promoting 'competitive federalism' among all states and union territories, is committed to utilize the India Innovation Index in catalysing the innovation outcome of the nation.

The Report Card

Most Innovative States

Rank	States	Score	
1	Karnataka	35.65	
2	Tamil Nadu	32.98	
3	Maharashtra	29.93	
4	Telangana	22.06	
5	Haryana	20.55	
6	Kerala	19.58	
7	Uttar Pradesh	19.08	
8	West Bengal	18.21	
9	Gujarat	16.86	
10	Andhra Pradesh	14.51	

States ranked on 33 indicators

National index needed to help states compete to innovate	India was at 57th position in GII in 2018 among 126 countries
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Rank	Major States	Score
1	KARNATAKA	42.50
2	MAHARASHTRA	38.03
3	TAMIL NADU	37.91
4	TELANGANA	33.23
5	KERALA	30.58
6	HARYANA	25.81
7	ANDHRA PRADESH	24.19
8	GUJARAT	23.63
9	UTTAR PRADESH	22.85
10	PUNJAB	22.54
11	WEST BENGAL	21.69
12	RAJASTHAN	20.83
13	MADHYA PRADESH	20.82
14	ODISHA	18.94
15	JHARKHAND	17.12
16	CHHATTISGARH	15.77
17	BIHAR	14.48

Rank	UT and City States	Score
1	DELHI	46.60
2	CHANDIGARH	38.57
3	DAMAN & DIU	26.76
4	PUDUCHERRY	25.23
5	GOA	24.92
6	DADRA & NAGAR HAVELI	22.74
7	ANDAMAN & NICOBAR ISLANDS	18.89
8	JAMMU & KASHMIR	18.62
9	LAKSHADWEEP	11.71

Rank	NE and Hill States	Score
1	HIMACHAL PRADESH	25.06
2	UTTARAKHAND	23.50
3	MANIPUR	22.78
4	SIKKIM	20.28
5	MIZORAM	16.93
6	ASSAM	16.38
7	ARUNACHAL PRADESH	14.90
8	NAGALAND	14.11
9	TRIPURA	12.84
10	MEGHALAYA	12.15

Institute for Competitiveness

- Institute for Competitiveness, India is the Indian knot in the global network of the Institute for Strategy and Competitiveness at Harvard Business School.
- Institute for Competitiveness, India is an international initiative centered in India, dedicated to enlarging and purposeful disseminating of the body of research and knowledge on competition and strategy
- Institute for Competitiveness, India conducts & supports indigenous research; offers academic & executive courses; provides advisory services to the Corporate & the Governments and organises events.
- The institute studies competition and its implications for company strategy; the competitiveness of nations, regions & cities and thus generate guidelines for businesses and those in governance; and suggests & provides solutions for socio-economic problems.

NITI Aayog: NITI Aayog Releases Report on Faecal Sludge and Septage Management in Urban Areas: Service and Business Models



*Relevance IN – Prelims (about the **book on faecal sludge and septage management in urban areas** + Mains (GS II Social issues + governance + government policies and interventions*

What's the NEWS

- NITI Aayog released a book on faecal sludge and septage management in urban areas.
- Jointly developed with **National Faecal Sludge and Septage Management (NFSSM) Alliance**, the book presents 27 case studies across 10 states and various service and business models adopted by Indian cities while implementing **faecal sludge and septage management (FSSM) initiatives**.
- The book was released jointly by NITI Aayog and MoHUA in a virtual event.

Know! the report highlights (about the book)

- This book provides a timely repository of FSSM best practices that can be adapted and replicated appropriately across the country
- Considering the importance of FSSM solutions, the Ministry of Housing and Urban Affairs came up with the national policy on FSSM in 2017.
- The policy has been rigorously pursued across the country—more than 24 states have adopted it and 12 of them have come up with their own policies.'
- Universal access to toilets was achieved in urban India with the construction of 66 lakh household toilets and more than 6 lakh community and public toilets.
- After achieving the target of 'Open-Defecation-Free' (ODF), India has now moved towards becoming ODF+ and ODF++.
- These targets go beyond the concept of access to sanitation and aim for safely managed sanitation systems, with adequate treatment and safe disposal of toilet waste.
- The report mentions that about 60% of urban households rely on onsite sanitation systems, which require dedicated planning for management of waste collected in these systems' containment structures.
- Accordingly, FSSM planning prioritizes human excreta management, a waste stream with a high potential for spreading diseases.
- The planning strategies entail emptying, transportation, treatment, and safe disposal of waste and possible reuse of output products post-treatment. It is a low-cost and easily scalable sanitation solution.

- Many Indian cities have come up with exemplary FSSM planning models, with optimal private-sector participation and greater mechanization of operations.
- The book aims to provide a comprehensive resource to Indian cities as they plan sustainable and inclusive sanitation.
- This book will help municipal functionaries, policy planners and private-sector players and entrepreneurs to take up FSSM as a major economic activity.'

National Faecal Sludge and Septage Management (NFSSM) Alliance

- NFSSM Alliance has worked with state governments on various innovative models, policies and guidelines across the sanitation value chain to ensure our cities' waste is effectively managed.
- Safe sanitation is a strong contributor to both public health and environmental sustainability, and needs focused attention, especially the safe and complete treatment of all human waste.
- The models captured in this report will help other states and cities replicate and scale them up to achieve 100% effective management of India's faecal sludge and septage in the next five years.'

National Faecal Sludge and Septage Management (NFSSM) Alliance

- The National Faecal Sludge and Septage Management(NFSSM) Alliance was established with support from the Bill and Melinda Gates Foundation in 2016 to support safe sanitation at the national, state and city level.
- The Alliance is recognized as the collaborative body that drives the discourse of faecal sludge and septage management (FSSM) forward in India.
- The NFSSM Alliance in collaboration with the Ministry of Housing and Urban Affairs (MoHUA) and the Department of Drinking Water and Sanitation (DWS) has been instrumental in the passage of India's first national policy on FSSM in 2017.

Miscellaneous: Regulatory Compliance Portal

Relevance IN – Prelims (about Regulatory Compliance Portal) + Mains (GS II government policies and interventions + governance, accountability and transparency)

What's the NEWS

- Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry has been directed by Cabinet Secretary to act as the nodal department for coordinating the exercise of minimizing regulatory compliance burden for citizens and businesses.
- A systematic exercise across Central Ministries/Departments and States/UTs is being undertaken by DPIIT to eliminate/reduce compliances which have an adverse impact on time and cost of businesses.
- A major initiative in this regard is the launch of Regulatory Compliance Portal by DPIIT on 1st January 2021.

Regulatory Compliance Portal

- The objective of this portal is to act as a bridge between citizens, industries and the Government in order to minimize burdensome compliances.
- It will also act as a first-of-its-kind central online repository of all Central and State-level compliances.
- All Central Ministries/Departments and States/UTs would examine laws/regulations/rules under their purview and implement an Action Plan to rationalize and simplify all the processes and remove burdensome compliances, decriminalize laws and repeal redundant Acts.
- These details would be captured and tracked on the Regulatory Compliance Portal. Industry stakeholders from Trade bodies such as CII, FICCI and ASSOCHAM would also be able to submit compliances and proposed recommendations.
- This will be assessed by concerned Government authorities and suitable action would be undertaken to minimize the regulatory compliance burden.
- Performance of activities on this portal would be closely reviewed by the senior Government officers.
- Cabinet Secretary would have real-time comprehensive view of all compliances and status of all requests raised across Central Ministries/Departments and States/UTs.
- Customized reports of action taken by each Ministry/Department and State/UT also gets generated for monitoring and evaluation.

Miscellaneous: 7th Edition of MASCRAGE 2021 organized by FICCI inaugurated

Relevance IN – Prelims (about MASCRAGE 2021) + Mains (GS II government policies and interventions)

What's the NEWS

- Union Minister of Health and Family welfare inaugurated the 7th Edition of “MASCRAGE 2021”- Movement against Smuggled & Counterfeit Trade organised by FICCI Cascade.
- The 7th edition of MASCRAGE will deliberate and discuss actionable, innovative policy solutions that can reverse the rising tide of counterfeit, smuggled and spurious products.
- The aim of MASCRAGE 2021 is to foster a healthy discussion on newer and practical strategies to mitigate the challenges of counterfeiting and smuggling especially in a post COVID era.
- Chief among them should be a focus on generating awareness.

Government of India has taken various measures to check menace of spurious drugs.

- The Drugs and Cosmetics Act, 1940 was amended under Drugs & Cosmetics Amendment Act 2008.
- Under this Act, if any drug is deemed to be adulterated or spurious, then the offender or liable person may face imprisonment for a term which shall not be less than ten years but which may extend to imprisonment for life.
- Special Courts for trial of offences under the Drugs and Cosmetics Act for speedy disposal have been established

Miscellaneous: National Baseline Geoscience Data Generation Programmes (2020-2024)

Relevance IN – Prelims (about NGPM, NGCM, NAGMP) + Mains (GS II government policies and interventions)

What's the NEWS

- To expedite exploration activities in the country, Geological Survey of India (GSI), has embarked upon an ambitious scheme to complete some major National level surveys by 2024:
 1. National Geochemical Mapping (NGCM),
 2. National Geophysical Mapping (NGPM),
 3. National Aero Geophysical Mapping Program (NAGMP).
- GSI is also going to adopt sophisticated deep penetration geophysical techniques such as Magneto-Telluric Surveys and Deep Seismic Reflection Surveys (DSRS) in order to define the crustal architecture for deep seated mineral targeting.

National Geoscience Data Repository (NGDR)

- GSI has also initiated its flagship initiative of National Geoscience Data Repository (NGDR) for collation of all the geoscience data of the country involving GSI, other national organizations with geoscience as a focused activities, all the state directorate of mines and geology, the academia engaged in research and development in the domain, the CPSEs engaged in exploration and geoscientific pursuits, and private sector agencies working in the domain.
- It aims at integrating the collected data by GSI and the similar organizations to build a repository on the digital medium entailing multiple user access.
- It is planned that all the stakeholders from India and across the globe who are willing to participate in the current auction regime for allocation of mineral acreages will be able to use the NGDR.
- The planned Baseline Geoscience Data Collection campaign would also lead to a huge database, which will be the primary inputs for future exploration programs.
- GSI is in consultation with BISAG-N, a national institute under Ministry of Information & Technology for development of NGDR.

National Geochemical Mapping (NGCM)

- GSI envisages completion of NGCM programme by 2024

- It is an all India programme to cover the entire surface area of the country by geochemical sampling.
- The NGCM work will generate distribution pattern of 62 elements (samples collected at 1 km x 1 km grid) for use in managing and developing natural resources; for application in environmental, agricultural, human health, other social concerns and to search for hidden mineral deposits.

National Geophysical Mapping (NGPM)

- The Program have been systematically generating basic and derived maps of Bouguer (Gravity) Anomaly and IGRF corrected magnetic total field maps of the country by conducting ground gravity and magnetic surveys in 1: 50,000 scale with an approximate observation density of one station in 2.5 sq. Km., to cover the entire country with preference to Obvious Geological Province (OGP) areas.
- The anomaly maps derived from the processed gravity and magnetic data provides all stakeholders a framework to design exploration strategies.

National Aero Geophysical Mapping Program (NAGMP).

- First of its kind project in the country, its objectives are to delineate concealed, deep seated structure/ litho-units capable of hosting mineralization, delineate extension of the existing mineralized zone and understating of shallow crustal architecture in the context of mineral occurrence.
- The first phase of work involved collection of data over selected areas (12 Blocks) of Obvious Geological Potential (OGP).
- It is for the first time that the multi-sensor aero-geophysical surveys (magnetic gradiometry and spectrometric) are being carried out by adopting such large regional scale survey parameters of 300 m traverse line spacing with aircraft flown at 80 m above ground level.

Significance of these Programmes:

- The collation, assimilation and integration of the data generated from the above projects and further interpretation will lead to identification of more areas for mineral exploration in the country.
- The increased investment in mineral exploration will build a robust pipeline of prospective mineral blocks for auction.
- This will ensure long-term viability and continuity of mining in the country taking India towards the cherished goal of 'Atmanirbhar Bharat'.
- The data generated through this mapping activity has helped to build up the knowledge database for National Geo-scientific information, which helps in boosting mineral exploration activities, and other earth science related socio-economic activities and programmes

Health: Neglected Tropical Diseases (NTDs)

Relevance in – Prelims (about Neglected Tropical Diseases (NTD) + Mains (GS II Health -initiatives taken by the government)

What's the NEWS

- January 30, 2021 will mark the second annual World Neglected Tropical Diseases (NTD) Day, highlighting the global community's commitment to ending Neglected Tropical Diseases that cause immeasurable suffering among the world's most marginalized communities.
- India joins the world to Combat Neglected Tropical Diseases. On this day the Qutub Minar will be lit up along with other landmarks across the world.
- On World NTD Day, on 30th January 2021, more than 50 landmarks representing 25 nations across the world will be lit up to celebrate how far we have come together in beating NTDs.
- India too will proudly join these countries, by illuminating UNESCO world heritage site Qutub Minar.
- 1 in 5 people around the world are affected by NTDs. India is home to the world's largest absolute burden of at least 11 of these major neglected tropical diseases.
- These diseases debilitate, disfigure, and can even be fatal to those affected.

Neglected tropical diseases (NTDs)

- NTDs are a diverse group of tropical infections which are common in low-income populations in developing regions of Africa, Asia, and the Americas.

- They are caused by a variety of pathogens such as viruses, bacteria, protozoa and parasitic worms (helminths).
- These diseases are contrasted with the big three infectious diseases (HIV/AIDS, tuberculosis, and malaria), which generally receive greater treatment and research funding.
- In sub-Saharan Africa, the effect of these diseases as a group is comparable to malaria and tuberculosis.
- NTD co-infection can also make HIV/AIDS and tuberculosis more deadly.

Natural Capital Accounting and Valuation of Ecosystem Services (NCAVES)



- The Ministry of Statistics and Programme Implementation (MoSPI), Government of India, has taken up several initiatives under the domain of “Natural Capital Accounting and Valuation of Ecosystem Services (NCAVES)”, which can help integrate the concerns of sustainability and conserving the environment for future use while charting the course for economic development.
- Since the work related to environment accounting in India is still in its early stages, primarily because of the large number of subjects to be covered under this domain, Services MoSPI would need a collaborative effort involving various stakeholders, including Line Ministries, state governments, multilateral organizations and research institutions for compiling a complete suite of accounts.
- With a view to facilitate this collaboration and highlight the uses to which natural capital accounts can be put, especially in the areas of decision making and policy analysis, the ministry is conducting the NCAVES India Forum (in a virtual format), as a series of three sessions in January 2021 to be held on January 14, 21 and 28, 2021.
- The NCAVES India Forum will be organized in collaboration with United Nations Statistics Division (UNSD), European Union and UN Environment.

The objectives of the National Forum would be:

- To present India’s achievements in the domain of Natural Capital Accounting (NCA);
- To prioritize the emerging opportunities for NCA in India;
- To familiarize stakeholders with the work undertaken by the different international agencies in the area of NCA; and
- To provide a platform to selected Research Institutions to present their research conducted in the valuation of ecosystem services.

System of Environmental Economic Accounting (SEEA)

- The System of Environmental-Economic Accounting (SEEA) is an international statistical standard that uses a systems approach to bring together economic and environmental information to measure the contribution of the environment to the economy and the impact of the economy on the environment.

- The SEEA uses a structure and classifications consistent with the System of National Accounts (SNA) to facilitate the development of indicators and analysis on the economy-environment nexus.

- The SEEA framework follows a similar accounting structure as the System of National Accounts (SNA).

- The framework uses concepts, definitions and classifications consistent with the SNA in order to facilitate the integration of environmental and economic statistics.

- The SEEA is a multi-purpose system that generates a wide range of statistics, accounts and indicators with many different potential analytical applications.

- It is a flexible system that can be adapted to countries' priorities and policy needs while at the same time providing a common framework, concepts, terms and definitions.

- The SEEA is a statistical system that brings together economic and

environmental information into a common framework to measure the condition of the environment, the contribution of the environment to the economy and the impact of the economy on the environment.

- The SEEA contains an internationally agreed set of standard concepts, definitions, classifications, accounting rules and tables to produce internationally comparable statistics.

- The SEEA facilitates better informed decision-making. The system of accounts offers a means of monitoring: pressures exerted by the economy on the environment, in terms of abstraction of natural resources and emissions; impacts in terms of changes in environmental condition; and how the economy responds in terms of expenditure on environmental protection and resource management.

- The SEEA does not propose particular indicators, but is instead a holistic multi-purpose information system that can generate a wide range of statistics and indicators with varying potential analytical applications.



What is the System of Environmental Economic Accounting (SEEA)?



Framework that integrates the measuring of links between the environment & the economy



Brings together economic & environmental information using a set of standard concepts, definitions, classifications, accounting rules & tables, producing Internationally comparable statistics

www.mospi.gov.in [GoIStats](#) [GoIStats](#) [goistats](#)

Social Issues: Ministry of Tribal Affairs Virtually Launches “Shramshakti” Digital Data Solution for Migrant Workers

Relevance IN – Prelims (about ShramShakti + Dedicated migration cell) + Mains (GS II Welfare schemes for vulnerable sections of the population by the Centre and States +good governance)

What's the NEWS

- The Union Minister of Tribal Affairs virtually through Video Conference launched “ShramShakti”, a National Migration Support Portal at a programme held at Panjim, Goa
- It would effectively help in the smooth formulation of state and national level programs for migrant workers.
- He also launched a tribal migration cell, a tribal museum at Goa and “ShramSaathi”, a training manual for migrant workers.
- The Chief Minister of Goa also launched dedicated Migration cell in Goa to facilitate and support migrants who come from different States to Goa.

Know! about these recent launches and their benefits

- The lack of real time data of migrants was the biggest challenge for state and national governments in formulating effective strategies and policy decisions for welfare of migrant workers at both source and destination states.

Shram Shakti

- The tribal migration repository, Shram Shakti would be able to successfully address the data gap and empower migrant workers who generally migrate in search of employment and income generation.
- It would also help the government for linking the migrant population with existing Welfare Scheme- under Atam Nirbhar Bharat.
- The various data that will be recorded via Shram Shakti include demographic profile, livelihood options, skill mapping and migration pattern.
- The tribal training module- ShramSaathi, to ensure that the process of livelihood migration is safe and productive.
- Tribal migrant workers often have low awareness about their rights and entitlements and ways to access services and social security in source and destination areas
- After training via this module, tribal migrant workers will be able to demand and access services, rights and entitlements related to livelihood and social security at their village before migration, as well after migration at destination towns and cities.

Dedicated migration cell

- The Chief Minister of Goa, informed that Goa is going to be first destination state of India to set up dedicated migration cell to address diverse issues of migrant workers.
- The cell would address multiple needs of migrants – legal support, skill development, job linkages, access to public services health, insurance, financial inclusion,

Shramshakti Digital Data Solution

- In a move that would effectively help in the smooth formulation of State and National level programs for migrant workers, the Union Ministry of Tribal Affairs (MoTA) is launching ShramShakti, a National Migration Support Portal and Shram-Saathi, a training manual for migrant workers
- To facilitate and support approximately 4 lacs migrants who come from different States to Goa, Chief Minister of Goa will also launch dedicated Migration cell in Goa.
- MoTA has also sanctioned Tribal research Institute, Tribal Museum, VanDhanKendras and Tribal LokUtsav in Goa.

NITI Aayog: Atal Innovation Mission launches new edition of Atal Tinkering Lab handbook

NITI Aayog **ATAL INNOVATION MISSION**

YouTube Live

On the occasion of
'National Youth Day'
AIM presents the

"The Atal Tinkering Lab Handbook 2.0"

12th January, 2021 4 PM Onwards

What's the NEWS

- Atal Innovation Mission, NITI Aayog launched its new edition of Atal Tinkering Lab handbook which reinforces detailed establishment and operational processes of the Atal Tinkering Labs and its journey towards an innovative 'Aatmanirbhar Bharat'.
- The publication coincides with the birth anniversary of Swami Vivekananda, also celebrated as the National Youth Day to honor the birthday of Swami Vivekananda who voiced the important role that youth play in the building up of a strong nation throughout his life.

The Atal Tinkering Lab Handbook 2.0'

- The handbook named 'The Atal Tinkering Lab Handbook 2.0' outlines a practical guidance on structural, selection, establishment and celebration aspects of the AIM's flagship ATL programme.
- It provides a detailed guidance for schools across the country on building a technically robust mechanism of grass root innovations through ATLs.
- ATL Handbook encompasses 3 years of on-the-ground work done by the AIM team in a framework using 4 key pillars of the ATL initiative – Selection, Establishment, Enablement, and Celebration.
- This Handbook is one more important addition to NITI Aayog's arsenal of quality Policy works, and is rooted with best practices in grassroots experiences and interventions."
- This book will be a one stop reference for all schools, mentors and innovators in knowing various aspects of Atal tinkering labs and leveraging the same.

Know! about ATL:

- An Atal Tinkering Lab provides a makerspace where young minds can give shape to their ideas through hands on do-it-yourself mode; and learn innovation skills.
- To foster entrepreneurship and innovation, Atal Innovation Mission, NITI Aayog has established over 7000 ATLs across the country so far enabling over 3 Million+ students between Grade VI to Grade XII acquire a problem solving, tinkering and innovative mindset.

Connect to the Past: ATL App Development Module

- The Atal Innovation Mission of Centre's think-tank, NITI Aayog, has launched a free online app development course for school students across the country.
- Under the Atal Tinkering Lab initiative, AIM, NITI Aayog launched the ATL App Development module for India's young minds
- It is the online course intends to make mobile application-developers of school students under Atal Tinkering Lab initiative of AIM.
- The course has been jointly developed by NITI Aayog's AIM and Indian startup, Plezmo.
- This would be one of the largest App learning and development initiatives at a school level in any country.

Flagship schemes/initiatives of NITI Aayog

Atal Tinkering Lab

- In ATLs, students of class 6th to 12th acquire a problem-solving attitude, develop innovative solutions leveraging technologies like 3D printers, robotics, miniaturised electronics, IOT and programming and DIY kits, with support from teachers and mentors.

Atal Innovative Mission

- AIM is the Government of India's flagship initiative to promote a culture of innovation and entrepreneurship in the country.
- AIM's objective is to develop new programmes and policies for fostering innovation in different sectors of the economy, provide platform and collaboration opportunities for different stakeholders, create awareness and create an umbrella structure to oversee innovation ecosystem of the country.

Six major initiatives of AIM:

- Atal Tinkering Labs-Creating problem-solving mindset across schools in India.

- Atal Incubation Centers-Fostering world class start-ups and adding a new dimension to the incubator model.
- Atal New India Challenges-Fostering product innovations and aligning them to the needs of various sectors/ministries.
- Mentor India Campaign- A national Mentor network in collaboration with public sector, corporates and institutions, to support all the initiatives of the mission.
- Atal Community Innovation Centre- To stimulate community centric innovation and ideas in the unserved / underserved regions of the country including Tier 2 and Tier 3 cities.
- ARISE-To stimulate innovation and research in the MSME industry.

Generation Unlimited

- Generation Unlimited is a new UNICEF-led global partnership that aims to ensure that every young person age 10-24 is in some form of school, learning, training, self-employment, or age-appropriate employment by 2030.
- It aims to co-create and scale up proven solutions related to secondary age-education, skills for learning, employability and decent work, and empowerment, with a focus on girls.

Governance: PM chairs 35th PRAGATI interaction

Relevance IN – Prelims (about Pragati platform) + Mains (GS II good governance)

What's the NEWS

- Prime Minister chaired the meeting of 35th edition of PRAGATI, the ICT based multi-modal platform for Pro-Active Governance and Timely Implementation, involving Central and State governments.
- In the meeting, ten agenda items were taken for review including nine projects and one program.
- Among the nine projects, three projects were from the Ministry of Railways, three from MORTH, and one project each from DPIIT, Power Ministry and Ministry of External Affairs.
- Up to the 34th edition of PRAGATI meetings, 283 projects having a total cost of 13.14 lakh crore have been reviewed.

PRAGATI (Pro-Active Governance And Timely Implementation),

- It is aimed at starting a culture of Pro-Active Governance and Timely Implementation.
- It is also a robust system for bringing e-transparency and e-accountability with real-time presence and exchange among the key stakeholders.
- The platform was launched on March 25, 2015.
- It is a multi-purpose and multi-modal platform that is aimed at addressing common man's grievances, and simultaneously monitoring and reviewing important programmes and projects of the Government of India as well as projects flagged by State Governments.
- The PRAGATI platform uniquely bundles three latest technologies: Digital data management, video-conferencing and geo-spatial technology.
- It also offers a unique combination in the direction of cooperative federalism since it brings on one stage the Secretaries of Government of India and the Chief Secretaries of the States.
- With this, the Prime Minister is able to discuss the issues with the concerned Central and State officials with full information and latest visuals of the ground level situation.
- It is a three-tier system (PMO, Union Government Secretaries, and Chief Secretaries of the States)
- Prime Minister will hold a monthly programme where he will interact with the Government of India Secretaries, and Chief Secretaries through Video-conferencing enabled by data and geo-informatics visuals;
- Issues to be flagged before the PM are picked up from the available database regarding Public Grievances, on-going Programmes and pending Projects.
- The system will ride on, strengthen and re-engineer the data bases of the CPGRAMS for grievances, Project Monitoring Group (PMG) and the Ministry of Statistics and Programme Implementation. PRAGATI provides an interface and platform for all these three aspects.
- It will take into consideration various correspondences to PM's office by the common people or from high dignitaries of States and/or developers of public projects.

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GENERAL STUDIES III

**Science & Technology Economic
Developments, Biodiversity,
Environment, Internal Security and
Disaster management**

Government Schemes: Pradhan Mantri MUDRA Yojana (PMMY)

Relevance IN – Prelims (about PMMY) + Mains (GS II government policies and interventions + GS III financial inclusion)

What's the NEWS

- With small businesses unable to reopen or find traction after Covid-19 lockdown in Gujarat, the Non-Performing Assets (NPAs) under the Pradhan Mantri MUDRA Yojana (PMMY) have risen to over Rs 587 crore at the end of September 2020.
- The NPAs have risen despite the moratorium and the restructuring of the loans. These are small loans and people are not coming forward for repayment.

Pradhan Mantri MUDRA Yojana

- PMMY was launched by Prime Minister Narendra Modi on April 8, 2015, for providing loans upto Rs 10 lakh to non-corporate and non-farm, small and micro enterprises.
- Under the scheme, loans up to Rs 50,000 are given to “Shishu” beneficiaries, loans above Rs 50,000 and up to Rs 5 lakh are given to “Kishor” beneficiaries, while loans up to Rs 10 lakh are given to those designated as “Tarun”.
- These loans are classified as MUDRA loans under PMMY. These loans are given by Commercial Banks, RRBs, Small Finance Banks, MFIs and NBFCs.
- MUDRA is a refinancing Institution. MUDRA does not lend directly to the micro entrepreneurs / individuals.
- Mudra loans under Pradhan Mantri Mudra Yojana (PMMY) can be availed of from nearby branch office of a bank, NBFC, MFIs etc. Borrowers can also now file online application for MUDRA loans on Udyamimitra portal (www.udyamimitra.in).
- Under the aegis of PMMY, MUDRA has created three products namely ‘Shishu’, ‘Kishore’ and ‘Tarun’ to signify the stage of growth / development and funding needs of the beneficiary micro unit / entrepreneur and also provide a reference point for the next phase of graduation / growth.
- The biggest spike of NPAs has been among Tarun beneficiaries where the NPAs have grown by 56 per cent.
- In comparison, the NPAs in Tarun and Kishor categories is 24 per cent and 11 per cent respectively.

Science & Technology: Indian SARS-CoV-2 Genomic Consortia (INSACOG) launched

INDIAN SARS-COV-2 GENOMIC CONSORTIA (INSACOG)
launched, coordinated by Department of Biotechnology (DBT)
along with MoH&FW, ICMR, and CSIR

Department of Biotechnology
Government of India

- The consortium will ascertain the status of new variant of SARS-CoV-2 in the country
- The overall aim is to monitor the genomic variations in the SARS-CoV-2 on a regular basis through a multi-laboratory network across the country. The consortium will also assist in developing potential vaccines in the future.
- The consortium will ascertain the status of new variant of SARS-CoV-2 in the country, establish a sentinel surveillance for early detection of genomic variants with public health implication, and determine the genomic variants in the unusual events/trends.

For more information, visit:
<https://bit.ly/34TK5eM>

dbtindia.gov.in | /dbtIndia | @dbtIndia | @dbtIndia

Relevance IN – Prelims (about the formation of Genomic Consortia and its objective) + Mains (GS III awareness in the field of science and technology)

What's the NEWS

- The government has launched the Indian SARS-CoV-2 Genomic Consortia (INSACOG), comprising 10 labs namely DBT-NIBMG Kalyani, DBT-ILS Bhubaneswar, ICMR-NIV Pune, DBT-NCCS Pune, CSIR-CCMB Hyderabad, DBT-CDFD Hyderabad, DBT-InSTEM/ NCBS Bengaluru, NIMHANS Bengaluru, CSIR-IGIB Delhi, and NCDC Delhi.

Genomic Consortia (INSACOG)

- The overall aim of the Indian SARS-CoV-2 Genomics Consortium is to monitor the genomic variations in the SARS-CoV-2 on a regular basis through a multi-laboratory network.
- This vital research consortium will also assist in developing potential vaccines in the future. The consortium will ascertain the status of new variant of SARS-CoV-2 (SARS-CoV-2 VUI 202012/01) in the country, establish a sentinel surveillance for early detection of genomic variants with public health implication, and determine the genomic variants in the unusual events/trends (super-spreader events, high mortality/morbidity trend areas etc.).
- INSACOG will have a high level Inter-Ministerial Steering Committee which will provide guidance and oversight to the consortium specially for policy matters and it will have a Scientific Advisory Group for scientific and technical guidance.
- Coordinated by Department of Biotechnology (DBT) along with MoH&FW, ICMR, and CSIR, the strategy and roadmap of the National SARS CoV2 Genome Sequencing Consortium (INSACOG) has been prepared.

Novel SARS-CoV-2 Virus

- In the backdrop of the emergence of a newly identified variant of the novel SARS-CoV-2 Virus in the UK, South Africa and some other parts of the world, the Government has taken action to accelerate Virus Surveillance, Genome Sequencing and Characterization.
- A new variant, which that was found in the UK, especially in the London region, is defined by multiple mutations in the Spike region, as well as mutations in other genomic regions.
- As per DBTDBT, these mutations are rapidly increasing the number of variants of the virus.
- This variant is significantly more transmissible than previously circulating variants, with an estimated potential to increase the reproductive number with an estimated increased transmissibility of up to 70%
- The Indian SARS-CoV-2 Genomics Consortium (INSACOG) will monitor the genomic variations on a regular basis through the multi-laboratory network.
- Knowledge generated through this vital research consortium will also assist in developing diagnostics and potential therapeutics and vaccines in the future.
- DBT-NIBMG as the Co-ordinating Unit of Genome Sequencing Consortium and will closely work with a Nodal Unit of NCDC on activities like SOPs, data annotation, data analysis, data release etc.
- NCDC will maintain a database of all samples of the new variants of public health significance.

Economy: Remission of Duties and Taxes on Exported Products (RoDTEP) Scheme gets implemented from 01.01.2021

Relevance IN – Prelims (about RoDTEP scheme) + Mains (GS III Economic developments)

What's the NEWS

- Taking a major step to boost exports, Government has decided to extend the benefit of the Scheme for Remission of Duties and Taxes on Exported Products (RoDTEP) to all export goods with effect from 1st January, 2021.

Know! about RoDTEP scheme

- The RoDTEP scheme would refund to exporters the embedded Central, State and local duties/taxes that were so far not being rebated/refunded and were, therefore, placing our exports at a disadvantage.
- The refund would be credited in an exporter's ledger account with Customs and used to pay Basic Customs duty on imported goods. The credits can also be transferred to other importers.

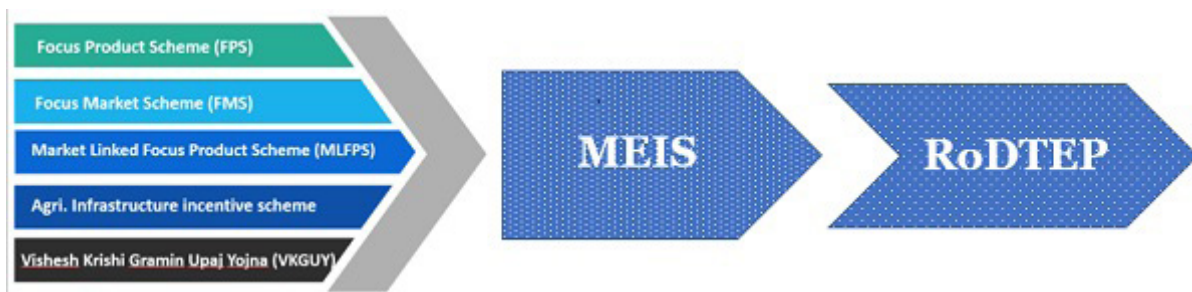
- The RoDTEP rates would be notified shortly by the Department of Commerce, based on the recommendation of a Committee chaired by Dr. G.K. Pillai, former Commerce and Home Secretary.
- The RoDTEP shall be allowed, subject to specified conditions and exclusions. The notified rates, irrespective of the date of notification, shall apply with effect from 1st January, 2021 to all eligible exports of goods.

Know! about the genesis of RoDTEP Scheme

- The RoDTEP Scheme was launched in 2020 to boost exports of India in International markets.
- Under the scheme, a mechanism will be created for reimbursement of levies, taxes or duties at central, state and local levels. Prior to the scheme, the reimbursements were not done under any mechanism.
- Merchandise Exports from India Scheme (MEIS) was replaced by RoDTEP Scheme as MEIS was not WTO-compliant.
- The RoDTEP Scheme will coordinate with the World Trade Organization to reduce the post production transaction costs for the exporters.
- Under the RoDTEP Scheme, the exporters of India will meet international standards for exports. This will boost the value of Indian products in the international market.
- It is being achieved through certification and affordable testing that will be provided under the scheme rather than relying on international organizations.

Connect to the Past (March 2020)

- Dispute Resolution Panel (DRP) of World Trade Organisation (WTO) ruled that India's export subsidy schemes violate global trade norms and has been asked to withdraw some export subsidy programmes, since subsidy schemes run by the Indian government were giving undue advantage to Indian businesses.
- Indian Government has appealed to the appellate body of WTO, challenging the decision of DRP.
- Currently the appeal is pending before the dysfunctional appellate body of WTO which provides time to Indian Government time to replace the present subsidy schemes.
- Meanwhile, Indian government decided to discontinue existing export incentive schemes which are in compliant with global trade rules.
- Indian Government has come up with a WTO compliant proposed scheme called '**Remission of Duties or Taxes on Export Products**' (RoDTEP) to replace the present scheme of MEIS.
- RoDTEP is a new scheme to replace the existing **MEIS** scheme for exports of goods from India, which aims to reimburse the taxes and duties incurred by exporters
- The rebate would be claimed as a percentage of the Freight On Board (FOB) value of exports.
- The Indian government has recently approved this scheme and will be notified in a phased manner and accordingly Items will be shifted from existing scheme MEIS to RoDTEP with proper monitoring & audit mechanism.
- This scheme will incentivise exporters at an estimated cost of Rs. 50,000 crore to the exchequer.



Evolution of RoDTEP

Key differences between MEIS and RoDTEP?

Aspect	MEIS	RoDTEP
Schema of Incentive	Additional Incentive on Exports of goods apart from other refunds and drawbacks available on undertaking the said exports.	Refund of Indirect taxes on Inputs used in the manufacture of exported product which is not being currently reimbursed by any other existing schemes.
WTO Compliance	Non-Compliant with WTO trade norms	Compliant with WTO trade norms
Incentive Percentage	2% to 5% of FOB value of Exports.	Product based % way of reward – Expected to be lesser than the existing MEIS Incentive scheme [To be notified later]
Mode of Issuance	Issuance in the form of transferable scrips (Hardcopy/ downloadable)	Issuance in the form of transferable duty credit/ electronic scrip which will be maintained in electronic ledger.
Transferability	Freely Transferable	Freely Transferable

Infrastructure Development: Paradip Port

Relevance in – Prelims (about Paradip Port + about the proposed project) + Mains (GS III infrastructure development)

What's the NEWS

- The Cabinet Committee on Economic Affairs has approved the project 'Deepening and Optimization of Inner Harbour Facilities including Development of Western Dock on Build, Operate and Transfer (BOT) basis under Public-Private Partnership (PPP) mode to handle cape size vessels at Paradip Port'.

Know! about the proposed project

- The proposed project envisages Construction of Western Dock Basin with facilities to handle cape size vessels by the selected BOT Concessionaire with an ultimate capacity of 25 MTPA (Million tonnes per annum) in two phases of 12.50 MTPA each.
- On commissioning of the project, it shall cater to the requirement of coal & limestone imports besides export of granulated slag & finished steel products considering the large number of steel plants established in the hinterland of Paradip Port.
- The project shall also facilitate (i) de-congestion of the Port, (ii) reduce Sea freight making coal imports cheaper, and (iii) boost the industrial economy in the hinterland of the port leading to creation of job opportunities.



Paradip Port Trust (PPT)

- Paradip Port Trust (PPT), a Major Port under Government of India and administered under the Major Port Trusts Act, 1963, was commissioned in 1966 as a mono commodity port for export of iron ore.
- In the last 54 years, the Port has transformed itself to handle a variety of Exim cargoes which include iron ore, chrome ore, aluminium ingots, coal, POL, fertilizer raw materials, lime stone, clinker, finished steel products, containers, etc.
- In particular, the demand for import of coking coal & fluxes and export of finished steel products has been increasing in view of number of Steel Plants established in the hinterland of the Port necessitating capacity creation to cater to the Port hinterland requirements.

Infrastructure Development: Industrial Corridor nodes at Krishnapatnam and Tumakuru under CBIC and Multi Modal Logistics Hub & Multi Modal Transport Hub (MMTH) at Greater Noida approved

Relevance in – Prelims (about MMLH and MMTH and its benefits + about Industrial Corridor Programme and the location of newly approved infra projects) + Mains (GS III Infrastructure development)

What's the NEWS

- The Cabinet Committee on Economic Affairs has approved proposals of Department of Promotion of Industry & Internal Trade (DPIIT) for construction of various trunk infrastructure components for:
 - Krishnapatnam Industrial Area in Andhra Pradesh with an estimated cost of the project of Rs. 2,139.44 crore;
 - Tumakuru Industrial Area in Karnataka with an estimated cost of Rs. 1,701.81 crore;
 - Multi Modal Logistics Hub (MMLH) and Multi Modal Transport Hub (MMTH) at Greater Noida in Uttar Pradesh with an estimated cost of Rs. 3,883.80 crore.

Industrial Corridor Programme

- The objective of Industrial Corridor Programme is the creation of greenfield industrial cities with sustainable, 'plug n play', ICT enabled utilities to facilitate the manufacturing investments into the country by providing quality, reliable, sustainable and resilient infrastructure to industries.
- The developed land parcels in these cities will be ready for immediate allotment for attracting investments into manufacturing and positioning India as a strong player in the Global Value Chain.
- These projects have been planned on the backbone of multi modal connectivity infrastructure.
- Krishnapatnam Industrial Area in Andhra Pradesh and Tumakuru Industrial Area in Karnataka under Chennai Bengaluru Industrial Corridor (CBIC) have been approved to kick start the development in Chennai Bengaluru Industrial Corridor Project.
- These greenfield industrial cities will be self-sustained with world-class infrastructure, road and rail connectivity for freight movement to and from ports and logistic hubs along with reliable power and quality social infrastructure.

Multi Modal Logistics Hub (MMLH) & Multi Modal Transport Hub (MMTH)

- Multi Modal Logistics Hub (MMLH) & Multi Modal Transport Hub (MMTH) Projects at Greater Noida, U.P. are in close proximity to Eastern peripheral expressway, NH91, Noida- Greater Noida Expressway, Yamuna Expressway, Eastern & Western Dedicated Freight Corridors.



Salient Features:

- One-stop destination to freight companies and customers
- Creation of greenfield industrial cities with plug n play, ICT enabled utilities
- World-class infrastructure
- Road & Rail connectivity for freight movement to and from ports & logistic hubs
- World-class passenger movement facilities

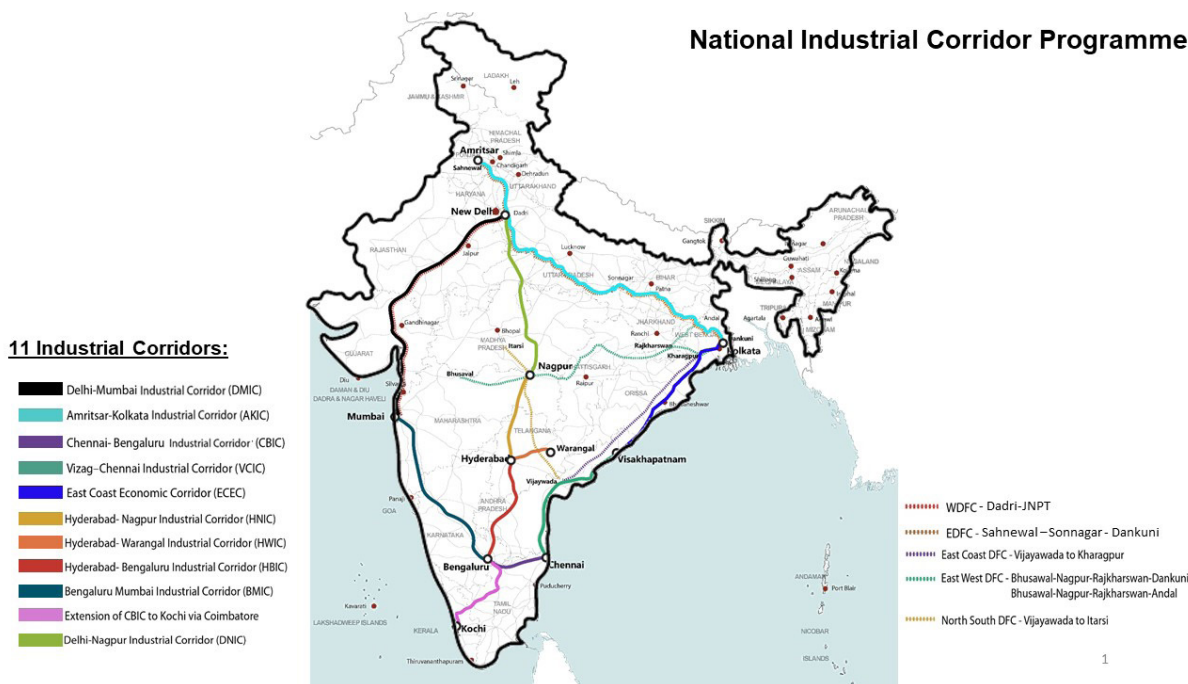
- Logistics Hub project will be developed as a world-class facility that will provide efficient storage/transitioning of goods to/from the Dedicated Freight Corridors (DFC) and offer a one-stop destination to freight companies and customers.
- The facility will not only provide standard container handling activities but also provide various value-added services to reduce logistics cost with improved efficiency of operations.
- Multi Modal Transport Hub (MMTH) project located near the already existing Indian Railways station of Boraki will act as a transport hub with provisioning of Rail, Road and MRTS accessibility for the passengers in a seamless manner.
- MMTH will have space for Inter State Bus Terminal (ISBT), Local Bus Terminal (LBT), Metro, commercial, retail & hotel space and green open spaces.
- The project will provide world-class passenger movement facilities for the growing population of the catchment zone catering to upcoming developments in U.P. sub-region of the NCR and thus, decongest Delhi.

National Industrial Corridor Development Programme

- Govt. of India is developing various Industrial Corridor Projects as part of National Industrial Corridor programme which is aimed at development of futuristic industrial cities in India which can compete with the best manufacturing and investment destinations in the world.

11 Industrial Corridors Projects are being taken up for development with 30 Projects to be developed in 04 phases up to 2024-25:

1. Delhi Mumbai Industrial Corridor (DMIC);
2. Chennai Bengaluru Industrial Corridor (CBIC);
3. Amritsar Kolkata Industrial Corridor (AKIC);
4. East Coast Industrial Corridor (ECIC) with Vizag Chennai Industrial Corridor (VCIC) as Phase 1;
5. Bengaluru Mumbai Industrial Corridor (BMIC);
6. Extension of CBIC to Kochi via Coimbatore;
7. Hyderabad Nagpur Industrial Corridor (HNIC);
8. Hyderabad Warangal Industrial Corridor (HWIC);
9. Hyderabad Bengaluru Industrial Corridor (HBIC);
10. Odisha Economic Corridor (OEC);
11. Delhi Nagpur Industrial Corridor (DNIC).



- While developing the Delhi Mumbai Industrial Corridor (DMIC) project, Western DFC has been considered as the transportation backbone while Eastern DFC has been considered as the backbone for Amritsar Kolkata Industrial Corridor (AKIC) project.
- For other industrial corridor projects like Chennai Bengaluru Industrial Corridor (CBIC) and Bengaluru Mumbai Industrial Corridor (BMIC), NH-4 has been considered as the backbone.
- For East Coast Economic Corridor (ECEC), NH-5 which is part of the Golden Quadrilateral, the Kolkata–Chennai rail route has been considered as the transport backbone.
- The proposed North-South East-West and East Coast Dedicated Freight Corridors will further supplement the existing transportation backbone for the corresponding Industrial Corridors.

Science and Technology: India launched the 40th scientific expedition to Antarctica.

Relevance IN – Prelims (about the 40th expedition highlights + about Indian Antarctic expeditions + about NCPOR) + Mains (GS III awareness in the field of science and technology)

What's the NEWS

- This Indian expedition marks four decades of country's scientific endeavour to the southern white continent.
- The 40th expedition journey will be flagged off from Goa on January 5, 2021, with 43 members onboard.
- The chartered ice-class vessel MV Vasiliy Golovnin will make this journey and will reach Antarctica in 30 days.
- After leaving behind a team of 40 members, it would return to India in April 2021. On return, it will also bring back the winter team of the preceding trip.



Indian Antarctic expeditions

- The Indian Antarctic expeditions began in 1981.
- After a humble beginning, the Indian Antarctic programme has now credited to have built three permanent research base stations in Antarctica—named Dakshin Gangotri, Maitri, and Bharati.
- As of today, India has two operational research stations in Antarctica named Maitri and Bharati.
- The National Centre for Polar and Ocean Research (NCPOR), Goa, manages the entire Indian Antarctic program.

40th Indian Antarctic expedition

- The focus is to support the ongoing scientific projects on climate change, geology, ocean observations, electric and magnetic flux measurements, environmental monitoring; resupplying of food, fuel, provisions and spare; and accomplishing the return of the winter crew.
- India is committed to maintaining the continent of Antarctica free of COVID-19.
- The expedition will duly follow all protocols for the deployment of men and material as per Council of Managers of National Antarctic Programs(COMNAP).

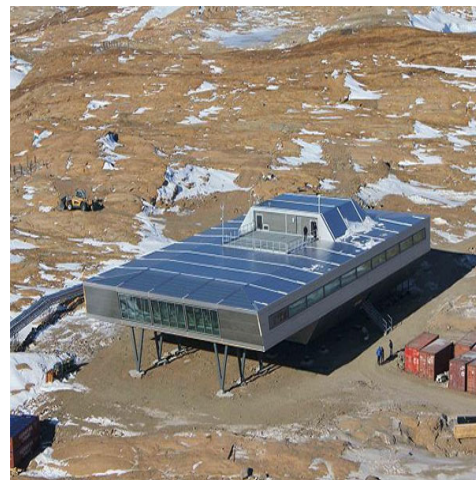
Council of Managers of National Antarctic Programs(COMNAP).

- COMNAP is the international association, formed in 1988, which brings together its Members, who are the National Antarctic Programs.
- National Antarctic Programs are those organizations that have responsibility for delivering and supporting scientific research in the Antarctic Treaty Area on behalf of their respective governments and in the spirit of the Antarctic Treaty.

- COMNAP's purpose which can be found in its Constitution is to “develop and promote best practice in managing the support of scientific research in Antarctica”
- COMNAP consists of 30 National Antarctic Program Members including India

Know! about India's National Antarctic Program

- India began its National Antarctic Program under the aegis of Department of Ocean Development (DOD) of the Government of India in 1981.
- A Centre dedicated to Antarctic Expeditions, named as ‘Antarctic Study Centre (ASC)’ was established at Goa in 1988.
- The ASC was subsequently upgraded into an autonomous institute ‘National Centre for Antarctic and Ocean Research (NCAOR) under DOD (now known as Ministry of Earth Sciences).
- In August 2018, the Ministry of Earth Sciences changed the name of NCAOR to the National Centre for Polar & Ocean Research (NCPOR).
- The main goals of the NCPOR are to plan, promote and execute the entire gamut of polar sciences and logistic activities of the country in Antarctica, the Arctic and in the Southern Ocean.
- NCPOR is also responsible for construction on new research stations and maintenance of existing stations in Polar Regions.
- The year round station, Maitri was built in 1989 on the Schirmacher Oasis in Queen Maud Land.
- Previously, India operated the station Dakshin Gangotri from 1983 – 1989 which was abandoned after being buried in ice.
- India extended its Antarctic presence by building a new station in the Larsemann Hills region about 3,000 kilometers from Maitri.
- The new station is named Bharati and has been operational since 18th March 2012.
- NCPOR also manages India's flagged Oceanographic Research Vessel Sagar Kanya.
- This vessel was commissioned in 1983 and has an endurance of approximately 45 days.
- It is a versatile ocean research platform equipped with advanced scientific equipment and related facilities for carrying out marine geological and geophysical surveys, meteorological, biological, physical and chemical oceanographic research in the deeper parts of the Indian Ocean region.



Bharati Station, officially opened on 18 March 2012



Dakshin Gangotri Station



Maitri Station

- The NCPOR also charts different research vessels from local and international operators for its multifarious oceanographic research in coastal, tropical and Southern oceans.
- The activities of NCPOR in Polar Regions and other mandated spheres are fully met by the Grant-in-aid by the Government of India.

Infrastructure Development: Sagarmala Seaplane Services (SSPS)

Relevance IN – Prelims (about SSPS and its destination – location) + Mains (GS III infrastructure development + inclusive development)

What's the NEWS

- Ministry of Ports, Shipping and Waterways is initiating the process of commencing operations of the Seaplane services, on the select routes, under a Special Purpose Vehicle (SPV) framework through prospective airline operators.
- The project execution and implementation would be through Sagarmala Development Company Ltd (SDCL), which is under the administrative control of the Ministry.
- Several destinations are envisaged for seaplane operations.

The proposed Origin-Destination pairs under Hub and Spoke model include

- Islands of Andaman & Nicobar and Lakshadweep
- Guwahati Riverfront & Umranso Reservoir in Assam
- Yamuna Riverfront / Delhi (as Hub) to Ayodhya, Tehri, Srinagar(Uttarakhand), Chandigarh and many other tourist places of Punjab & HP
- Mumbai (as Hub) to Shirdi, Lonavala, Ganpatipule
- Surat (as Hub) to Dwarka, Mandvi & Kandla
- Khindsi Dam, Nagpur & Erai Dam, Chandrapur (in Maharashtra)



- One such Seaplane Service is already in operation between Kevadia and Sabarmati Riverfront in Ahmedabad
- The joint development and operation of “Sagarmala Seaplane Services (SSPS)” will be undertaken by forming a Special Purpose Vehicle (SPV) with Sagarmala Development Company Limited (SDCL).

Environment: Govt. approves advisory for management of Human-Wildlife Conflict across the country.

Relevance IN – Prelims (about Standing Committee of National Board of Wildlife(SC-NBWL -advisory highlights) + Mains (GS III Environment conservation)

What's the NEWS

- The Standing Committee of National Board of Wildlife(SC-NBWL) in its 60th meeting has approved the advisory for management of Human-Wildlife Conflict(HWC) in the country.

Know! about the advisory

- The advisory makes important prescriptions for the States/ Union Territories for dealing with Human-Wildlife conflict situations and seeks expedited inter-departmental coordinated and effective actions.
- The advisory envisages empowering gram panchayats in dealing with the problematic wild animals as per the section 11 (1) (b) of Wild Life (Protection) Act, 1972.
- Utilising add-on coverage under the Pradhan MantriFasalBimaYojna for crop compensation against crop damage due to HWC and augmenting fodder and water sources within the forest areas are some key steps envisaged to reduce HWC.
- The advisory also envisages prescribing inter-departmental committees at local/state level, adoption of early warning systems, creation of barriers

Standing Committee of National Board of Wildlife(SC-NBWL) meeting highlights

- Some of the other important approvals took place during the meeting are, **inclusion of Caracal**, a medium size wild cat found in some parts of Rajasthan and Gujarat, into the list of critically endangered species for taking up conservation efforts with financial support under Centrally sponsored Scheme-Development of Wildlife Habitat.
- Now, there are 22 wildlife species under recovery programme for critically endangered species.
- SC-NBWL recommended the proposal for **Tinaighat-Castlerock-Caranzol Railway** doubling of South Western Railways, Karnataka with certain mitigation measures as advised by the Wildlife Institute of India, Dehradun.

National Board for Wildlife (NBWL)

- The National Board for Wildlife (NBWL) is constituted by the Central Government under Section 5 A of the Wildlife (Protection) Act, 1972 (WLPA).
- The Standing Committee of NBWL considers proposals after a series of levels of scrutiny and have recommendations of the State Chief Wildlife Warden, State Government and the State Board for Wildlife.
- The National Board may, at its discretion, constitute a Standing Committee under sub-section (1) of Section 5B.
- The Standing Committee shall consist of the Vice-Chairperson (Union Minister in charge of Forests and Wildlife) the Member Secretary and not more than ten members to be nominated by the Vice-Chairperson from amongst the members of the National Board.
- The NBWL Standing Committee chaired by the Union Minister, Environment & Forests is duty bound to ensure compliance of the mandate's statutory processes prescribed by the WLPA in letter and spirit.

Specific provisions in the WLPA include:

- No construction of commercial lodges, hotels... shall be undertaken except with the prior approval of the National Board
- No alteration of the boundaries of a National Park except on a recommendation of the National Board;
- No destruction, removal of wildlife or forest produce from a National Park or diversion of habitat unless State Government in consultation with the National Board authorizes the issue of such permit
- Ensure Tiger Reserves and areas linking one protected area with another are not diverted for ecologically unsustainable uses except in public interest and with the approval of the National Board
- No alteration or denotification of Tiger Reserves without the approval of the National Board for Wildlife

Science and Technology: CEPI Centralized network lab at DBT-THSTI Faridabad

Relevance IN – Prelims (about CEPI + THSTI) + Mains (GS III awareness in the field of science and technology)

What's the NEWS

- The Minister for Science & Technology, Health & Family Welfare and Earth Sciences inaugurated one of the seven labs of the world called as the centralized network lab of Coalition for Epidemic Preparedness Innovations (CEPI) established at Translational Health Science & Technology Institute (THSTI), Faridabad, through virtual platform

Coalition for Epidemic Preparedness Innovations (CEPI) and Translational Health Science & Technology Institute (THSTI)

- THSTI is an institute of the Department of Biotechnology (DBT). This is the only laboratory of such kind in India and is also accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL) (ISO 17025:2017).
- The CEPI laboratory will be a great addition to the ability of THSTI to enhance quality of services towards making the vaccine and its acceptability at Global level.
- CEPI is an innovative partnership between public, private, philanthropic, and civil organizations, launched at Davos in 2017, to develop vaccines to stop future epidemics.
- The Department of Biotechnology, Ministry of Science & Technology, Government of India is implementing the Ind-CEPI mission titled 'India Centric Epidemic Preparedness through Rapid Vaccine Development: Supporting Indian Vaccine Development Aligned with the Global Initiative of the Coalition for Epidemic Preparedness Innovations (CEPI)'.
- Ind-CEPI Mission aims to strengthen the development of vaccines for the diseases of epidemic potential in India as well as build coordinated preparedness in the Indian public health system and vaccine industry to address existing and emergent infectious threats in India.
- The major focus at present is to help evaluating new Covid-19 vaccines, using standard analysis and same reagents in all labs so that vaccine produced has global acceptance and repeatability of the results, for global use.

Defence: Advanced Biodigester Mk-II Technology

Relevance IN – Prelims (about Advanced biodigester Mk-II technology) + Mains (GS III awareness in the field of science and technology)

What's the NEWS

- Defence Research and Development Organisation (DRDO), Government of India's premier research agency and Maharashtra Metro Rail Corporation (MAHA –METRO), a joint venture company of the GoI and Government of Maharashtra are working together to conserve water and protect the environment by installing **DRDO's eco-friendly biodigester units (a non-sewered sanitation technology)** in its facilities.
- A Memorandum of Understanding (MOU) was inked between MAHA-METRO and DRDO through which DRDO will render technical support for the implementation of its advanced biodigester Mk-II technology for the treatment of human waste (night soil) in the metro rail network.

Advanced biodigester Mk-II technology

- DRDO's biodigester is an indigenous, green and cost-effective technology, with a rare distinction of having one of the largest numbers of DRDO-licensees (ToT holders).
- Indian Railways has already installed about 2.40 lakh biodigesters in its fleet of passenger coaches. Now for MAHA-METRO, the technology has been revamped and further improved in a bid to save the water and space.
- A customized version of this MK-II Biodigester, suitable for treating human waste generated from houseboats in Dal Lake was successfully demonstrated by the DRDO to J&K Administration.
- This technology is upgraded through improvements in the bio-degradation efficiency, design modification and addition of secondary treatment module.
- The new reactor is designed to provide more path length with increased biological reaction time, thereby enhancing the bio-degradation efficiency of the system.
- This technology was primarily developed for the armed forces in high altitude Himalayan regions, including Leh-Ladakh and Siachen glacier.

Infrastructure Development: Details of Freight Corridor dedicated

Relevance IN – Prelims (about Dedicated Freight corridor – updates) + Mains (GS III infrastructure development)

What's the NEWS

- Dedicated Freight corridor, whose Rewari - Madar section on Western corridor, was dedicated to the Nation by Prime Minister Shri Narendra, is going to be the game changer in economic development of the country.

Know! about DFCCIL

- Dedicated Freight Corridor Corporation of India is constructing the Western DFC (1506 Route km) and Eastern DFC (1875 route km including Sonnagar-Dankuni PPP Section).
- The EDFC starting from Sahnewal near Ludhiana (Punjab) will pass through the states of Punjab, Haryana, Uttar Pradesh, Bihar and Jharkhand to terminate at Dankuni in West Bengal.
- The Western Corridor connecting Dadri in Uttar Pradesh to Jawaharlal Nehru Port (JNPT) in Mumbai will traverse through the states of UP, Haryana, Rajasthan, Gujarat and Maharashtra of WDFC.
- DFCCIL will run freight train at the maximum speed of 100 km/per hour as against the current maximum speed of 75 kmph on Indian Railway tracks whereas the average speed of freight trains will also be increased from existing speed of 26 kmph on Indian Railways lines to 70 kmph on Dedicated Freight Corridors (DFC).

Main objectives of DFCCIL

- Decongest the existing Indian Railway network.
- Increase the average speed of goods trains from existing 25 to 70 kmph.
- Run Heavy Haul trains (higher axle load of 25/32.5 Tonne) & overall load of 13,000 Tonne.
- Facilitate the running of longer (1.5 km) and double stack container trains.
- Connect the existing ports and industrial areas for faster movement of goods.
- Energy efficient and environment friendly rail transport system as per global standards.
- Increase the rail share from existing 30% to 45%.
- Reduce the logistic cost of transportation

Innovations and State-of-the-art Technology:

- Heavy and long Haul train operation of 25 Axle ton with having provision of 32.5 Ton axle load for the First time in India.
- Double stack containers in Western DFC
- Double line electric (2 X 25 KV) track to undertake higher haulage at higher speeds
- Automated New Track Construction (NTC) machine which can lay track at the speed of 1.5 km per day.
- Automated Wiring train for Overhead Equipment Work (OHE) capable of wiring upto 3 km per shift.
- Train Protection and Warning System (TPWS) for safe and efficient operation
- Elimination of road level crossing
- Developing Multi Modal Logistic Hubs and integration with Delhi-Mumbai Industrial Corridor & Amritsar-Kolkata Industrial corridor.

WAG 12 Loco

- The WAG -12 electric super powered double-section locomotives of 12,000 HP are capable of hauling 6000 tonnes at a top speed of 120 kmph.
- They are planned to be deployed for operations on major freight routes, including the Dedicated Freight Corridors (DFCs), transforming the heavy freight transportation landscape of India.
- These locomotives manufactured at Madhepura are of 12,000-horsepower with a twin Bo-Bo design, engineered to run at a speed that is twice as faster than regular locomotives and are built to carry 6000 tonnes of goods in one go.
- Equipped with Insulated Gate Bipolar Transistors (IGBT) based propulsion technology, the WAG 12B uses regenerative braking, reducing energy consumption. With 1676 mm of Broad Gauge, these e-locomotives are designed to take smooth turns even at the sharpest of curves.

Disaster Management: India to get UN tag of international disaster response force for NDRF

Relevance IN – Prelims (about Standardisation of NDRF + about INSARAG) + Mains (GS III disaster management)

What's the NEWS

- India could soon be a part of the United Nations (UN) mandated international disaster rescue operations as the country's federal contingency force, NDRF, is expected to obtain a globally recognised standardisation later this year.

International Search and Rescue Advisory Group)

- The authorisation will be done by the Switzerland-headquartered INSARAG (or the International Search and Rescue Advisory Group) which is a network of more than 90 countries and organisations under the UN umbrella to deal with urban search and rescue related issues.
- The UN agency INSARAG standardises disaster response teams across the world. It is an international gold standard
- INSARAG committee, comprising Australian and Singaporean experts, has conducted preliminary review of NDRF teams in September, 2019, but the outbreak of COVID-19 pandemic put the process on a back burner for a while.

Standardisation of NDRF (will get the tag of international response force)

- If there is a call from the UN to respond to some disaster you will be called upon...you will be an international response force
- In past India's NDRF went for international rescue operations) but when NDRF went to Japan and Nepal in the past it was a bilateral decision between two countries but with this standardisation it will be a UN mandated task.

Know! about NDRF

- The National Disaster Response Force was raised in 2006 to undertake specific tasks of relief and rescue during natural and manmade disasters or life threatening situations.
- It has 12 operational battalions comprising more than 15,000 personnel based across the country at present while four more battalions are taking shape.
- UN standardisation could "trigger a long-term process where more and more of its teams can be certified".
- It (INSARAG standardisation) will be a good thing as NDRF is second to none. This could lead to a cascading effect where NDRF can become a national accreditation agency for state disaster response forces and that also could be UN supported.
- In Chile and China, the UN has certified their provincial teams so that state teams can also travel across the world for disaster response operations
- Standardisation of NDRF can add to the profile of India being a great disaster response oriented country where the protocols and standard operating procedures are of world standard

Environment: Management Effectiveness Evaluation (MEE)

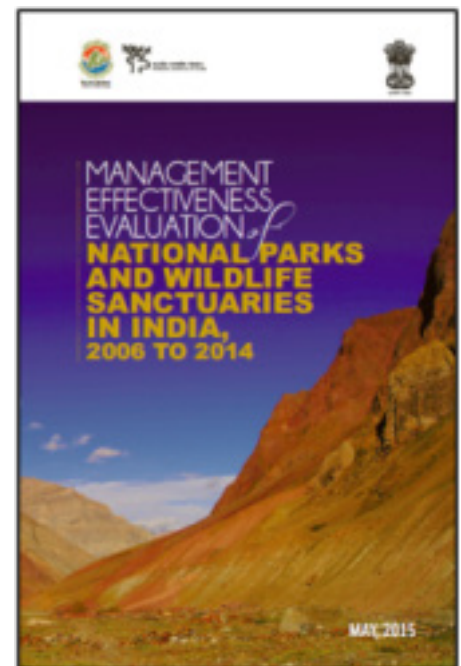
Relevance IN – Prelims (about Management Effectiveness Evaluation (MEE) and MEE-ZOO framework + Mains (GS III environment conservation)

What's the NEWS

- Minister for Environment, Forest and Climate Change released Management Effectiveness Evaluation (MEE) of 146 National Park and Wildlife Sanctuaries in the Country.
- At present, India has a network of 903 Protected Areas in the country covering about 5% of the total geographic area of the country.
- In order to assess the efficacy of Protected Areas, evaluation of management effectiveness is required.

Management Effectiveness Evaluation (MEE)

- From this year onwards 10 best National Parks, 5 coastal and Marine parks and top five Zoos in the country will be ranked and awarded every year.
- Management Effectiveness Evaluation (MEE) of Protected Areas (PAs) has emerged as a key tool for PA managers and is increasingly being used by governments and international bodies to understand the strengths and weaknesses of the protected area management systems.
- The results of present assessment are encouraging with overall mean MEE score of 62.01% which is higher than the global mean of 56%.



- With this round of evaluation, the Ministry of Environment, Forest and Climate Change (MoEFCC) successfully completed one full cycle of evaluating all terrestrial National Parks and Wildlife Sanctuaries of the country from 2006 to 2019.
- MEE is a very important document that provides valuable guidance on various aspects of wildlife and protected area expand MEE of Marine Protected Areas.
- A new framework for MEE of Marine Protected Areas has been also jointly prepared by WII and MoEF&CC and it will be very useful document to implement.

Management Effectiveness Evaluation of Indian Zoos (MEE-ZOO)

- The Environment Minister also launched the Management Effectiveness Evaluation of Indian Zoos (MEE-ZOO) framework which proposes guidelines, criteria and indicators for evaluation of zoos of the country through Management Effectiveness Evaluation Process (MEE-ZOO) in a manner which is discrete, holistic and independent.
- The assessment criteria and indicators look beyond the traditional concepts, include issues of animal welfare, husbandry and sustainability of resources and finance.
- The MEE-ZOO exercise is moving towards developing highest standards in Zoos across India and adhering to core values of accountability, transparency, innovation, use of technology, collaboration and integrity to achieve the mandate of conservation of endangered species.

India's biodiversity

- India has a thriving biodiversity. "70% of the global tiger population, 70% of asiatic lions and more than 60% of leopards population in India is a certificate of India's thriving biodiversity, as these big cats sit at the top of food chain and their growing numbers shows the well being of the whole ecosystem.

Defence: Indian Navy to Coordinate Second Edition of Largest Coastal Defence Exercise – Sea Vigil 21



Relevance IN – Prelims (about Sea – Vigil 21) + Mains (GS III Security challenges and their management in border areas; linkages of organized crime with terrorism)

What's the NEWS

- The second edition of the biennial pan-India coastal defence exercise 'Sea Vigil-21' will be conducted on 12-13 January 2021.

Know! all about Sea – Vigil 21

- The exercise, inaugural edition of which was conducted in January 2019; will be undertaken along the entire 7516 km coastline and Exclusive Economic Zone of India and will involve all the 13 coastal States and Union Territories along with other maritime stakeholders, including the fishing and coastal communities.

- The exercise is being coordinated by the Indian Navy. The entire coastal security set up was reorganised after the 26/11 Terror attack at Mumbai which was launched via the sea route.
- The scale and conceptual expanse of the exercise is unprecedented in terms of the geographical extent, the number of stakeholders involved, the number of units participating and in terms of the objectives to be met.
- The exercise is a build up towards the major Theatre level exercise TROPEX [Theatre-level Readiness Operational Exercise] which Indian Navy conducts every two years.
- SEA VIGIL and TROPEX together will cover the entire spectrum of maritime security challenges, including transition from peace to conflict.
- Assets of the Indian Navy, Coast Guard, Customs and other maritime agencies will participate in SEA VIGIL, the conduct of which is also being facilitated by the Ministries of Defence, Home Affairs, Shipping, Petroleum and Natural Gas, Fisheries, Customs, State Governments and other agencies of Centre/ State.
- The conduct of a security exercise at national-level is aimed to serve a larger purpose. It provides opportunity, at the apex level, to assess our preparedness in the domain of maritime security and coastal defence.
- Exercise 'SEA VIGIL 21' will provide a realistic assessment of our strengths and weaknesses and thus will help in further strengthening maritime and national security.

Defence: Light Combat Aircrafts (LCA) 'Tejas'

Relevance IN – Prelims (about Tejas) + Mains (GS III indigenization of technology and developing new technology).

What's the NEWS

- The Cabinet met under the Chairmanship of Prime Minister has approved procurement of 73 LCA Tejas Mk-1A fighter aircrafts and 10 LCA Tejas Mk-1 Trainer aircrafts

Know! more about it

- Light Combat Aircraft Mk-1A variant is an indigenously designed, developed and manufactured state-of-the-art modern 4+ generation fighter aircraft.
- This aircraft is equipped with critical operational capabilities of Active Electronically Scanned Array (AESA) Radar, Beyond Visual Range (BVR) Missile, Electronic Warfare (EW) Suite and Air to Air Refuelling (AAR) would be a potent platform to meet the operational requirements of Indian Air Force, IAF.
- It is the first "Buy (Indian-Indigenously Designed, Developed and Manufactured)" category procurement of combat aircrafts with an indigenous content of 50% which will progressively reach 60% by the end of the programme.
- The Cabinet has also approved infrastructure development by IAF under the project to enable them handle repairs or servicing at their base depot
- The manufacturing of Light Combat Aircraft by Hindustan Aeronautics Limited, HAL will give a further push to Atmanirbhar Bharat initiative and boost indigenisation of defence production and the defence industry in the country.
- About 500 Indian companies including MSMEs in the design and manufacturing sectors will be working with HAL in this procurement.



- The programme would act as a catalyst for transforming the Indian aerospace manufacturing ecosystem into a vibrant Atmanirbhar-self-sustaining ecosystem.

Information Technology: Grand Challenge for Development of “Smart Water Supply Measurement and Monitoring System

Relevance IN – Prelims (about National Jal Jeevan Mission (NJJM) + ICT Grand Challenge) + Mains (GS II government policies and interventions + GS III inclusive development – Role of ICT)

What's the NEWS

- National Jal Jeevan Mission (NJJM), Department of Drinking Water and Sanitation, Ministry of Jal Shakti in partnership with Ministry of Electronics & Information Technology launched an ICT Grand Challenge, for development of a 'Smart water supply measurement and monitoring system' on 15th September, 2020.
- Jal Jeevan Mission would be the user agency of the Grand Challenge and C-DAC, Bangalore is the implementing agency, providing technical support for the challenge.

ICT Grand Challenge (progress so far)

- Total 218 applications were received, from various sectors like LLP Companies, Indian Tech start-ups, Individuals etc.
- A Jury was constituted, with experts from academia, industry, Jal Jeevan Mission, C-DAC, STPI, COEs, MeitY, etc.
- Results of ICT Grand Challenge were announced on 20th November 2020, based on the recommendations of the jury.
- 10 applicants have been selected for ideation to prototype stage and each are being supported with Rs. 7.50 Lakhs.
- Currently the prototypes are being developed which are going to be evaluated during the last week of January, 2021 by the jury.
- A water test bed is set up in C-DAC Bangalore Electronics City Campus for these evaluations.
- Best four techno-economically viable prototypes shall be selected for product development and each team will receive Rs. 25 Lakh to build their solution as per the need of the user agency.
- Based on evaluation, one winner and two runner-ups will be selected and supported by 50 Lakh (winner) and 20 Lakh each (runner-ups).
- The grand challenge is being carried out with funding support from MeitY and National Jal Jeevan Mission.
- Jal Jeevan Mission is a flagship programme of Union Government which aims to provide tap water connection to every rural household by 2024.

- Announced by Prime Minister on 15th August, 2019, the Mission so far has provided 3.13 crore household tap connections in rural areas.

Know! about ICT Grand Challenge

- National Jal Jeevan Mission (NJJM), Department of Drinking Water and Sanitation, Ministry of Jal Shakti in partnership with Ministry of Electronics & Information Technology launched an ICT Grand Challenge, for development of a 'Smart water supply measurement and monitoring system' on 15th September 2020.
- Jal Jeevan Mission would be the user agent of the Grand Challenge and C-DAC, Bangalore is the implementing agency, providing technical support for the challenge. Enthusiastic participation was observed from all over India.

Agriculture: Virtual Buyer Seller Meet

Relevance IN – Prelims (about APEDA + about the virtual meet + about millet +IFAD) + Mains (GS III farmer's welfare – steps taken by the government)

What's the NEWS

- The Agricultural and Processed Food Products Export Development Authority (APEDA) in association with Andhra Pradesh Drought Mitigation Project (APDMP), an externally aided project funded by IFAD, organized a Virtual Buyer Seller Meet with Millet Exporters and FPOs of Millet for establishing marketing linkages.
- Considering the potential of increasing exports of Millets and Millet products and the focus given by Government for development of Millet sector of Nutri Cereals, APEDA is closely interacting with Indian Institute of Millet Research (IIMR) and other stakeholders like National Institute Nutrition, CFTRI and Farmer Producer Organizations (FPOs) for perspective planning of five years for promotion of Millets and Millet products.
- This platform has provided an opportunity to the exporters and FPOs to interact with each other for supply and sourcing of products.

Know! about Millet

- Millet is a common term to categorize small-seeded grasses that are often termed nutri-cereals, and includes Sorghum, Pearl Millet, Ragi, Small Millet, Foxtail Millet, Proso Millet, Barnyard Millet, Kodo Millet and other millets. Millets are the cereal crops generally small-seeded and known for high nutritive value.

Agricultural and Processed Food Products Export Development Authority (APEDA)

- It is an Apex-Export Trade Promotion, Active government body -set up by the Ministry of Commerce and Industry, Government of India under the Agriculture and Processed Food products Export Development Authority.
- The Act was passed by the parliament in December 1985. It was formed and came into effect from 13th February 1986 (34 years ago) by the notification issued in the Gazette of India
- APEDA is the premier body of export promotion of fresh vegetables and fruits.
- It provides the crucial interface between farmers, storehouses, packers, exporters, surface transport, ports, Railways, Airways, all others engaged in export trade and finally to the international market.
- Directly and indirectly it serves the farmers, exporters from different states and many other services in the country.
- It works like a bridge in between agricultural and processed food producers to reach to the exporters in international markets.

Know! about IFAD

- The International Fund for Agricultural Development is an international financial institution and a specialised agency of the United Nations that works to address poverty and hunger in rural areas of developing countries.
- It is the only multilateral development organization that focuses solely on rural economies and food security.
- Headquartered in Rome, Italy, IFAD is involved in over 200 projects across nearly 100 countries.
- It funds and sponsors initiatives that improve land and water management, develop rural infrastructure, train and educate farmers in more efficient technologies, build up resilience against climate change, enhancing market accessibility, and more.
- IFAD has 177 member states and works in partnership with the Organization of the Petroleum Exporting Countries (OPEC) and members of the Organisation for Economic Co-operation and Development (OECD).

Science & Technology: India's first indigenous device for correcting ballooning of brain arteries and healing of heart hole

Relevance IN – Prelims (about Atrial Septal Defect Occluder and an Intracranial Flow Diverter Stents + about TRC + terminologies associated with stent development) + Mains (GS III awareness in the field of science and technology)

What's the NEWS

- Indians will soon have access to the country's first indigenous flow diverter stent for diverting blood flow away from localized ballooning of arteries in the brain and a device that promotes better healing of the hole in the heart.

Know! the current status of these stents

- Nitinol-based occluder devices, which are presently used to heal Atrial Septal Defect(ASD) or hole in the heart that affects 8 out of every 1000 living babies born, are currently imported to meet demands.
- India does not manufacture flow diverters stents, which are needed for diverting blood flow away from an intracranial aneurysm or localized ballooning of arteries in the brain, helping reduce chances of its rupture and related stroke.

Know! the recent development

- In order to address the challenges, **Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST)**, an autonomous institute of the Department of Science & Technology (DST), Govt. of India, under the **Technical Research Centre (TRC)**, has entered into Technology Transfer Agreements with Pune based Biorad Medisys for two biomedical implant devices--- **an Atrial Septal Defect Occluder and an Intracranial Flow Diverter Stents** developed by the institute in collaboration with **National Aerospace Laboratories, Bangalore (CSIR-NAL)** using **super elastic NiTiNOL alloys**.

Novel ASD occlude

- The novel ASD occlude developed by SCTIMST promotes better healing of the hole in the heart and also has softer edge for minimizing the damage to adjacent tissue.
- The delivery system has a novel release mechanism to enable smooth release of the device.
- The device is protected through two Indian patent applications, one international patent application, and design registration.

Flexible flow diverter stent

- The flexible flow diverter stent that allows accurate positioning of the device across the aneurysm developed by SCTIMST is the first one to be manufactured in India.
- It possesses kink resistance and improved radial strength through a novel braiding pattern making the device flexible and adaptable to the distortion of the vessel boundaries.
- The device is also provided with radio-opaque markers for radiographic visibility.
- The associated delivery system allows accurate positioning of the device across the aneurysm.
- These features have been protected through two Indian patent applications, one international patent application, and design registration.

Technical Research Centre (TRC)

- The Technical Research Centre (TRC), funded by Department of Science & Technology and Ministry of Science & Technology, Government of India at S. N. Bose National Centre for Basic Sciences has been launched in January 2016.
- The aim is to establish an innovation cum incubator centre within the S N Bose Centre that would build harnessable science and technology platforms by leveraging on its existing core strength in materials science and spectroscopic techniques.
- The primary focus will be on health care, environment, and material and alloy industry.

Science & Technology: Heat-tolerant wheat varieties

Relevance IN – Prelims (about the heat tolerant wheat varieties + DNA methylation + epigenomic mapping)

What's the NEWS

- Heat stress causes a dramatic reduction in yield and quality loss of wheat, the food crop that nurtures more than one-third of the world population.

Know! all about the experiment (terminologies associated with the experiment)

- Dr. Vijay Gahlaut, an Inspire Faculty Fellow of the Department of Science and Technology (DST), is **exploring the epigenetic route to modify gene expression** in a manner that is stably transmitted but do not involve differences in the underlying DNA sequence, so that the heritable genes do not buckle under heat stress and non-stress conditions during different grain filling stages.
- He will identify the role of **DNA methylation** (a biological process by which methyl groups are added to the DNA molecule) patterns of heat stress-tolerant and heat stress-sensitive wheat genotypes during different grain filling stages.
- He proposes to carry this out through a process called **epigenomic mapping**, which will also help in the identification of natural epigenetic variation.
- He has shown that differential expression pattern of **C5-MTase genes** under heat stress suggesting their role in stress response in wheat. This could give a major clue to producing heat-tolerant productive wheat varieties.
- The utilization of identical genes that differ in the extent of **methylation known asepialleles** identified through his research could be one of the most promising solutions to improving wheat productivity by engineering elite wheat varieties with enhanced heat stress tolerance and increase grain yield.

Governance: 1st National Conference of States on Logistics

Relevance IN -Prelims (about the 1st national conference of states on logistics- highlights + steps taken by the government) + Mains (GS III centre-state relations + GS III infrastructure development)

What's the NEWS

- The Ministry of Commerce and Industry conducted the 1st National Conference of States on Logistics,
- The Ministry of Commerce and Industry is trying to integrate various means of transport, documentation & stakeholders through technology platforms, into a much-simplified way of working, which will enhance the Ease of Doing Business.
- Logistics is about ensuring customer satisfaction, and the associated infrastructure required to achieve that is what logistics is all about. Center & States are working as team.
- Logistics is all about 5R's: Getting the Right product - In the Right condition - At the Right place - At the Right time - To the Right customer.

Steps taken by the government to improve the Logistics

- National Logistics Policy, which is under consultation, along with the National Logistics Council and State Logistics Coordination Committee, will work as a template for better coordination and integrated development for logistics centre.
- In India, we have \$200 billion logistics ecosystem. A good part of it is supported by the Indian Railways.
- The government is making massive efforts to bring down the cost of logistics & expand the scope of service that Railways provide.
- Using COVID crisis as an opportunity, Railways reoriented its pattern of working. A zero-based time table was created.
- The average freight speed train speed was 46.77 kmph as compared to 22.47 kmph last year in the same period.”
- The average freight speed train is 97% higher as compared to the same period last year
- DFC are corridors which will only carry freight transport, increasing the speed exponentially and bringing down the cost while adding huge capacity to be able to transport volume goods & small parcels.

- By 2022, we will have both, the Eastern and Western Dedicated Freight Corridors ready and will serve the people of India.

Science and Technology: Quantum Computing Applications Lab, Powered by AWS established

aws

MeitY Quantum Computing Applications Lab
In Collaboration with AWS

19 January, 2021

Quantum Principles have been in use for decades

By using the laws of **quantum physics** to perform computation in novel and improved ways

Medical Imaging Laser Transistor

Why quantum computers?

Time vs Problem size graph showing exponential growth for classical computers (100 years) vs linear growth for quantum computers (1 minute).

Not 10x speedup but possibly 10^x (for some problems only)

Announcing the MeitY Quantum Computing Applications Lab, in collaboration with AWS

- World's first quantum computing lab on AWS**
On cloud, accessible to all
- Build for the world**
Focussed on national initiatives and priorities
- Skilling of resources**
Quantum Computing & Applications
- ~167,000 hrs of Simulation**
Per year
- ~200,000 Quantum Tasks**
Per year

Relevance IN – Prelims (about Quantum Computing Applications Lab and about Quantum Computing) + Mains (GS III awareness in the field of science and technology)

What's the NEWS

- The Ministry of Electronics and Information Technology (MeitY) in India will establish a Quantum Computing Applications Lab in the country, in collaboration with AWS, to accelerate quantum computing-led research and development and enable new scientific discoveries.

Quantum Computing Applications Lab

- The MeitY Quantum Computing Applications Lab will provide quantum computing as a service to government ministries and departments, researchers, scientists, academia, and developers, to enable advances in areas such as manufacturing, healthcare, agriculture, and aerospace engineering.
- AWS will provide hosting with technical and programmatic support for the Lab. This MeitY initiative will provide scientific, academic, and developer communities access to a quantum computing development environment aligned with the government's science and technology priorities.
- The MeitY Quantum Computing Applications Lab, established with the support of AWS, is the first of its kind initiative in the world, and aims to enable India's talented researchers to explore the uncharted applications of quantum computing, and pave the way for new discoveries and disruptions

Quantum computing

- Quantum computing is an emerging field that harnesses the laws of quantum mechanics to build powerful tools to process information
- It has the potential to solve computational problems that are beyond the reach of classical computers, and lead to new breakthroughs that can transform chemical engineering, material science, drug discovery, financial portfolio optimization, machine learning, and much more.

How it will work?

- The MeitY Quantum Computing Applications Lab will identify quantum computing problem statements for experimentation from among Central and State Governments, Research Institutions, and Academia.
- It will work with subject matter experts from the government sector to define the problem statements, and make them public, inviting applications from researchers, academia, and organizations to address them.

- The Lab will then provide select applicants with access to quantum computing hardware, simulators, and programming tools, on-demand and at no cost, via Amazon Braket, that enables scientists and developers to build algorithms, conduct advanced simulations, and run experiments.
- Amazon Braket provides a development environment to enable users to explore and design quantum algorithms, test and troubleshoot them on simulated quantum computers, and run them on different quantum hardware technologies.
- The MeitY Quantum Computing Applications Lab will help government bodies and the scientific community to identify problems and opportunities rapidly, and test real-world challenges through experiments and prototypes in a low risk environment.
- Outcomes from these experiments will help researchers evolve the problem statements, proof-of-concepts, and prototypes that will lead to the development of new applications, models, and frameworks in quantum computing.

Defence: DRDO inks framework MoU with MoRTH for Geo-hazard Management

Relevance IN – Prelims (about the MoU + about geohazard management + about DGRE) + Mains (GS III awareness in the field of science and technology)

What's the NEWS

- Defence Research and Development Organisation (DRDO) has entered into a framework memorandum of understanding (MoU) with the Ministry of Road Transport & Highways (MoRTH) to strengthen collaboration in the field of technical exchange and co-operation on sustainable geohazard management.

Know! how the geohazard management will ensure safety against landslides

- As per the agreement, DRDO and MoRTH will co-operate in various mutually beneficial areas related to geohazard management.
- The initiative will ensure safety against the adverse effects of landslides and other natural calamities on national highways in the country.
- DRDO's Defence Geo-Informatics Research Establishment (DGRE) is working for the development of critical technologies for enhancing combat effectiveness in various kinds of terrains and avalanches.
- The expertise of DGRE in mapping, forecasting, control and mitigation of landslides and avalanches in Himalayan terrain will be utilized for designing national highways including tunnels.
- Terrain and modelling simulation is an important asset with DGRE, which will play an important role in planning and building robust road infrastructure in difficult terrains.
- MoRTH is responsible for development & maintenance of National Highways across the country.
- It has been agreed that the expertise of DRDO will be utilized in providing sustainable mitigation measures to damages caused by landslides, avalanche and other natural factors on various National Highways in the Country.
- Some of the areas identified for collaboration include detailed investigation of the critical avalanches/geo hazards, planning, designing and formulation of sustainable mitigation measures for geo-hazards on national highways including tunnels, monitoring and supervision of mitigation measures etc.

Infrastructure Development: National Conference with States on Logistics

Relevance IN – Prelims (about the National conference on logistics -takeouts) + Mains (GS III Infrastructure development + GS II Centre-state relations + good governance)

What's the NEWS

- The National Conference with States on Logistics was organized on Tuesday 19th January, 2021 by the Department of Commerce, with the objective to initiate a consultative and collaborative framework for the Central and State Governments to work in a coordinated manner in the logistic sector.
- The Conference was attended by more than 175 participants from the States and UTs, Central Ministries and Industry bodies.
- The Conference emphasized that States have a key role to play in improving the country's logistics performance.

Know! the conference highlights

- A comprehensive 18 Point Agenda was presented to the States to improve the logistics.
- Thrust areas for logistics improvements in the States were identified as city logistics, simplification of approvals for warehouses, facilitation for warehousing development, reducing burden on truck movement and addressing shortage of truck drivers.
- It was decided that Ministry of Commerce & Industry will work with Ministry of Housing and Urban Affairs to focus on 50 cities for logistics planning initially.
- A plan for facilitation to reduce enforcement burden on truck drivers will be developed.
- Many States have already appointed senior officers as nodal officers for logistics and others will do the same in a short period of time.
- State Level Coordination Committees on Logistics will be formed. Central Ministries looking after the transportation will appoint State Nodal Officers to coordinate with the States.
- The Logistics Division of the Ministry of Commerce & Industry will embark on things on survey to assess and rank States on logistics performance.
- The State ranking will focus on data in addition to perspective on logistics performance.
- Support will be provided to the States to improve the capacity for logistics coordination.
- A City Conference will also be organized to take forward the initiatives of the Conference.

Steps taken by the government

- National Logistic Policy which is under consultation, will work as a template for better coordination and integrated development in logistics sector.
- The logistic team in the Ministry of Commerce & Industry is trying to integrate various means of transport, documentation and stakeholders through technology platforms, into a much-simplified way of working, which will enhance the Ease of Doing Business.

Strengthening the logistic ecosystem, as it is the backbone of the country (Way Forward)

- Emphasis should be on reducing the logistics costs from the present 13% to 8% which will help Indian trade become competitive, create jobs, improve India's ranking and make it a logistics hub for global supply chain.
- Each State must have a logistics policy and State should focus and develop the infrastructure.
- It is vital to realize the importance to have institutional mechanism to synergize all stakeholders concerning city logistics.
- Emphasis should be on rapid increase in urban space and assimilation and analysis of data to identify data flow in life city growth aspirations and infrastructure plans.
- The Logistics Division of the Commerce Ministry and the Smart City Mission of the Ministry of Housing and Urban Affairs will collaborate with identified cities to assist them, wherever required, in setting up a mechanism for coordination with Central Government agencies.
- Cities need to develop supply chain awareness and plan for infrastructure and its efficient use in existing and future scenarios.

Economy: First Consultative meeting held on Asset Monetization

Relevance IN–Prelims (about DIPAM+asset monetisation)+Mains (GS III economic development)

What's the NEWS

- The first consultative meeting on asset monetization was organized by Department of Investment and Public Asset Management (DIPAM) in partnership with World Bank.
- The meeting also had a large representation of State Governments and CPSEs.

Asset monetization

- Asset monetization is a stated objective of the Government and DIPAM is mandated to facilitate monetization of non-core public assets.
- The monetization process is complex and requires close cooperation and collaboration with all stakeholders.
- The meeting provided a platform for such an engagement.

- Several key issues were discussed in the meeting in the presence of all stakeholders.
- Both global and domestic perspective, best practice and experience was shared.
- The meeting ended with a set of key takeaways which will assist in developing capacity and guidance on asset monetization and accelerating the process.

Know! about DIPAM

- Department of Investment and Public Asset Management (DIPAM) deals with all matters relating to management of Central Government investments in equity including disinvestment of equity in Central Public Sector Undertakings.
- The Four major areas of its work relates to Strategic Disinvestment, Minority Stake Sales, Asset Monetisation and Capital Restructuring.
- It also deals with all matters relating to sale of Central Government equity through offer for sale or private placement or any other mode in the erstwhile Central Public Sector Undertakings. DIPAM is working as one of the Departments under the Ministry of Finance.

Connect to the Past

- Department of Investment and Public Asset Management (DIPAM) has signed an agreement with World Bank today (16 Nov 2020). Under the agreement, World Bank is to provide advisory services to DIPAM for asset monetization.
- DIPAM is mandated with facilitating monetization of non-core assets of government CPSEs under strategic disinvestment or closure and enemy property of value of INR 100 crores and above. DIPAM has a framework for monetizing non-core assets.
- The World Bank advisory project, approved by the Finance Minister, is aimed at analyzing public asset monetization in India and benchmarking its institutional and business models against international best practices.
- It is expected that this project would facilitate and accelerate the non-core asset monetization process and help unlock the value of these un-used/ marginally used assets which has the potential to substantially augment financial resources for further investments and growth.

Know! about Asset Monetization

- It involves creation of new sources of revenue by unlocking of value of hitherto unutilized or underutilized public **assets**. Internationally, it is recognized that public **assets** are a significant resource for all economies.

Defence: Indian Army Signs MoU with SIDM on Indigenisation and Innovation Partnership

Relevance IN–Prelims (about the MoU + about SIDM) + Mains (GS III indigenisation of technology)

What's the NEWS

- An MoU between the Indian Army & Society of Indian Defence Manufacturers (SIDM) was signed to provide further impetus to indigenisation and to achieve strategic independence by reducing dependence on foreign origin equipment.
- This MoU was signed on the occasion of 25 Years of Army-Industry Partnership with Confederation of Indian Industry (CII).
- With the signing of MoU with SIDM, Indian Army has reiterated its firm resolve towards achieving self-reliance by supporting and handholding indigenous defence industry.

Know! all about the Indian Army and industry collaboration

- Collaboration between the Indian Army and industry started in 1995 with the indigenisation of spares and has progressed to major defence platforms and a wide range of weapons and equipment.
- In order to optimise capability building and single contact with the industry, Indian Army has reorganised itself by aligning both the revenue and capital routes of procurement under Deputy Chief of Army Staff (Capability Development & Sustenance).
- Army Design Bureau (ADB) has been established to act as a direct facilitator with the industry and thereby connect the defence manufacturers directly with the user.

- These changes have resulted in a collaborative engagement between the technology provider, the equipment manufacturer and the user.
- The Government has made necessary policy changes to support indigenisation and achieving self-reliance in defence sector with the active support from the Army.
- Industry associations have provided a common platform for industry to interact with Indian Army to showcase their expertise.

Know! about SIDM

- The Society of Indian Defence Manufacturers (SIDM) is a not-for-profit association formed to be the apex body of the Indian defence industry.
- SIDM plays a proactive role as an advocate, catalyst, and facilitator for the growth and capability building of the defence industry in India.

Disaster Management: National Disaster Response Force (NDRF) celebrated its 16th Foundation Day

Relevance IN – Prelims (about NDRF) + Mains (GS III disaster management)

What's the NEWS

- The National Disaster Response Force (NDRF) celebrated its 16th Foundation Day
- Union Minister of State for Home Affairs was the Chief Guest at the programme.

National Disaster Response Force (NDRF)

- India faced some of its most severe natural calamities like Orissa Super Cyclone (1999), Gujarat Earthquake (2001) and Indian Ocean Tsunami (2004).
- This succession of events and the International environment brought to fore, the need of comprehensive disaster management plan.
- This led to the enactment of the Disaster Management Act on December 26th, 2005.
- The National Disaster Management Authority (NDMA) was constituted to lay down the policies, plans and guidelines for disaster management.
- The Disaster Management Act has statutory provisions for constitution of National Disaster Response Force (NDRF) for the purpose of specialized response to natural and man-made disasters. Accordingly, in 2006 NDRF was constituted with 8 Battalions.
- The Apex Body for Disaster Management in India is the National Disaster Management Authority (NDMA). The Chairman of the NDMA is the Prime Minister.
- The responsibility of managing disasters in India is that of the State Government. The 'Nodal Ministry' in the central government for management of natural disasters is the Ministry of Home Affairs
- When 'calamities of severe nature' occur, the Central Government is responsible for providing aid and assistance to the affected state, including deploying, at the State's request, of Armed Forces, Central Paramilitary Forces, National Disaster Response Force (NDRF), and such communication, air and other assets, as are available and needed.
- National Disaster Response Force (NDRF) is under the National Disaster Management Authority.
- The head of the NDRF is designated as Director General.
- The Director Generals of NDRF are IPS officers on deputation from Indian police organisations. Director General wears the uniform and badges of rank of an army three-star general.
- In a meeting of the NDMA with the Prime Minister on October 25, 2007, the need of NDRF being made a dedicated force was highlighted and accepted.
- This led to the notification of NDRF Rules on February 14th, 2008, making NDRF a dedicated force for disaster response related duties, under the unified command of DG NDRF.

NDRF (other highlights)

- The NDRF also included women who were playing an important role in every disaster, shoulder to shoulder with male colleagues.

- The NDRF conducted international disaster management exercises such as the SCO Joint Exercise 2019 and BIMSTEC 2020, to deal with any kind of disaster with mutual support.
- The National Disaster Response Force (NDRF) participated for the first time in the Republic Day Tableau 2020 and secured the first place.

Science & Technology: AstroSat's Ultraviolet Imaging Telescope spots rare ultraviolet-bright stars in a massive intriguing cosmic dinosaur in the Milky Way

Relevance IN – Prelims (about UV-bright stars + Astrosat + Globular cluster NGC 2808.) + Mains (GS III awareness in the field of space)

What's the NEWS

- Astronomers exploring the massive intriguing globular cluster in our Galaxy called NGC 2808 that is said to have at least five generations of stars have spotted rare hot UV-bright stars in it.

UV-bright stars

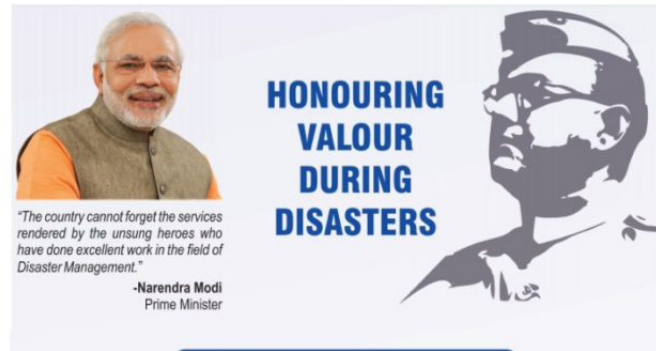
- These stars whose inner core is almost exposed, making them very hot, exist in the late stages of evolution of a Sun-like star.
- It is not clear how these stars end their lives as not many of them are detected in these fast-evolving phases, making their study crucial.
- The **old globular clusters referred to as dinosaurs of the universe** present excellent laboratories where astronomers can understand how stars evolve through various phases between their birth and death, scientists at the **Indian Institute of Astrophysics (IIA)** an autonomous institute of the Department of Science & Technology, Government of India, looked out for NGC 2808.
- With spectacular ultraviolet images of the cluster from Ultraviolet Imaging Telescope (UVIT) onboard **India's first multi-wavelength space satellite, AstroSat**, they distinguished the hot UV-bright stars from the relatively cooler red giant and main-sequence stars which appear dim in these images.
- The team of scientists combined the UVIT data with observations made using other space missions such as the Hubble Space Telescope and the Gaia telescope along with ground-based optical observations.
- About 34 UV-bright stars were found to be members of the globular cluster. From the data, the team derived the properties of these stars such as their surface temperatures, luminosities and radii.
- One of the UV-bright stars was found to be about 3000 times brighter than the Sun with a surface temperature of about 100,000 K.
- The properties of these stars were then used to place them on what astronomers call the Hertzsprung-Russell (HR) diagram along with theoretical models to throw light on the characteristics of their parent stars and to predict their future evolution.
- Most of the stars were found to have evolved from a solar stage called the horizontal branch stars with hardly any outer envelope.
- Thus they were bound to skip the last major phase of life called the asymptotic giant phase and directly become dead remnants or white dwarfs.

Globular cluster NGC 2808.

- The Indian multi-wavelength space observatory AstroSat, launched in September 2015, yields another exciting results.
- Using this observatory, astronomers have identified a new population of ultraviolet stars in the globular cluster NGC 2808.
- Globular clusters are collections of thousands to millions of stars, moving as one unit.
- These stars are tightly held together by gravity of the cluster itself, and are believed to have formed together at roughly the same time.
- Some globular clusters could be among the oldest objects in our Milky Way, which hosts over 150 of them.
- A globular cluster contains stars with a variety of masses but with similar chemical composition, a snapshot of it could reveal stars of different masses at different stages of their evolution.

- NGC 2808 is one of the most massive globular clusters that we know of, and is located at a distance of 47,000 light years from us.
- This cluster was observed by the team of researchers using the UltraViolet Imaging Telescope (UVIT) on-board AstroSat.

Disaster Management: Subhash Chandra Bose Aapda Prabandhan Puraskar 2021



Relevance IN – Prelims (about Subhash Chandra Bose Aapda Prabandhan Puraskar + about SEEDS + about Individual category) + Mains (GS III disaster management)

What's the NEWS

- To recognize and honour the invaluable contribution and selfless service rendered by individuals and organizations in India in the field of Disaster Management, Government of India has instituted an annual award known as Subhash Chandra Bose Aapda Prabandhan Puraskar.

Know! about the awards

- The award is announced every year on 23rd January, the birth anniversary of Netaji Subhash Chandra Bose.
- The award carries a cash prize of Rs. 51 lakh and a certificate in case of an institution and Rs. 5 lakh and a certificate in case of an individual.
- For the award this year, nominations were solicited from 1st July, 2020 onwards.
- In response to the award scheme, 371 valid nominations were received from institutions and individuals.
- For the year 2021, (i) Sustainable Environment and Ecological Development Society (in the institutional category) and (ii) Dr. Rajendra Kumar Bhandari (in the Individual category) have been selected for the Subhash Chandra Bose Aapda Prabandhan Puraskar for their excellent work in Disaster Management.

Institutional category: Sustainable Environment and Ecological Development Society

- SEEDS, a non-profit voluntary organization created in 1994, is a collective endeavour of young professionals drawn from development related fields.
- It is involved in research activities in community development, disaster management, environmental planning, transport planning, and urban and regional planning.
- Activities are carried out on behalf of government, semi-government and international development agencies.
- SEEDS has done commendable work in building community resilience to disasters.
- It has been working towards disaster readiness, response, and rehabilitation, building local capacities and enabling risk reduction at the community level in different States of India.
- With a deep understanding of their contexts, local leaders have a unique ability to reach excluded communities who lack access or fall outside the gambit of large-scale programming.

Individual category

- Dr. Rajendra Kumar Bhandari is among the pioneers in India who laid the foundation of scientific studies on geo hazards in general and landslides in particular.
- He established India's first laboratory on landslide studies at CSIR-Central Building Research Institute (CBRI), and three other Centres.

- He also conducted studies on disasters in India, deployed latest technologies of **Ground Penetrating Radar**; Geotechnical Digital System; vibrating wire Piezometers; Laser Particle Analyser; Pile Drive Analyser and Acoustic Emission Technology for in-depth investigations, instrumentation, monitoring and risk analysis for Early Warning against Landslides.

Other contributions

- The first global example of permanently fixing a major landslide by deep mountain drainage through directional drilling
- The first globally accepted explanation of undrained loading triggered landslides; and the first Landslide Hazard Atlas of India, published by Building Materials and Technology Promotion Council (BMTPC).
- His advocacy for National Disaster Knowledge Network became part of the recommendations of the High Powered Committee in October 2001.
- He led Indian National Academy of Engineering (INAE) Forum to deliver a set of Actionable Recommendations on Landslide disaster mitigation.

Science & Technology: New ant species discovered from Kerala



Relevance IN – Prelims (about these new species of ant)

What's the NEWS

- Two new species of a rare ant genus have been discovered in India.

Know! about these new ants

- The species of the ant genus *Ooceraea* found in Kerala, and Tamil Nadu add to the diversity of this rare genus.
- They differ from others of the same genus on the basis of the number of antennal segments.
- One of them found in the Periyar Tiger Reserve of Kerala, has been named *Ooceraea joshii*, in honour of Prof. Amitabh Joshi, a distinguished evolutionary biologist from **Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)** an autonomous institute of the Department of Science & Technology (DST), Government of India.
- The two new species, the first ones spotted with ten-segmented antennae among this rare genus,
- The genus is currently represented by 14 species of which eight possess nine-segmented antennae, while five possess eleven- segmented antennae and one species has recently been reported with eight-segmented antennae.
- In India, the genus was so far represented by two species with nine- and eleven-segmented antennae respectively.
- The newly discovered ant species with ten segmented antennae discovered, establish an old world lineage that contains a species emerging as the only model organism among the ant subfamily.

Education: Agri-Food Techathon



The poster for the Agri-Food Techathon 2021 features a yellow background with portraits of the event's organizers and guests. At the top, it reads 'कृषि-खाद्य टेकाथॉन' and 'AGRI-FOOD TECHATHON' in bold red letters, followed by 'January - March 2021'. Below this, it states 'Opening Ceremony on January 25, 2021' in a red box. The event is organized by the 'कृषि व्यवसाय उद्भवन केन्द्र' (Agri Business Incubation Centre) at the 'भारतीय प्रौद्योगिकी संस्थान खड़गपुर' (Indian Institute of Technology Kharagpur). It is in association with 'AgFE, CRDIST & RMSoEE'. A 'Sensitization Workshop' is scheduled for '11 - 24 January 2021'. A red box at the bottom mentions a 'Panel discussion on "Agri-Food Tech Startup Ecosystem in India"'. The guests listed include: Chief Guest Dr. Ramesh Pokhriyal 'Nishank' (Hon'ble Minister, Ministry of Education Govt of India), Guest of Honour Dr. G. R. Chintala (Chairman NABARD), Prof. V. K. Tewari (Director IIT Kharagpur), Prof. S. K. Bhattacharyya (Deputy Director IIT Kharagpur), Prof. Rintu Banerjee (Head AgFE & CRDIST), Prof. C. S. Kumar (Head RMSoEE), and Prof. H. N. Mishra (Professor IC & Nodal Officer ABIC).

Relevance IN – Prelims (about Agri-Food Techathon) + Mains (GS II government policies and interventions + GS III farmers welfare)

What's the NEWS

- Union Education inaugurated the Agri-Food Techathon
- He also laid the foundation for Agri-Business Incubation Centre (ABIC), which will incubate innovative ideas in the agriculture and food technology domain for creating 'Agri-preneures.'

Agri-Food Techathon 2021

- Indian Institute of Technology Kharagpur, in collaboration with NABARD, organised the 'Agri-Food Techathon 2021' (AFT 2021), a first-of-its-kind event to promote the participation of India's youth in innovation and entrepreneurship in different domains of the Agri-Food sector.
- The vision of incubating startups to create an ecosystem under the Agri-Food Techathon 2021 will bring together science and technology, and agriculture to support the farmers of our country.
- Such initiatives will help take the 'Vocal for Local and Local for Global' initiative to each corner of our country.
- This Techathon will lay the foundation of an Atmanirbhar Bharat and help India emerge as a Vishwaguru.

International Organisations: World Economic Forum Annual Meeting 2021 (WEF's Davos Dialogue)



Relevance in – Prelims (about World Economic Forum’s Davos Dialogue + about Industry 4.0) + Mains (GS III. Important International institutions, agencies and fora- their structure, mandate.)

What’s the NEWS

- The Prime Minister, addressed the World Economic Forum’s Davos Dialogue
- He spoke on the ‘Fourth Industrial Revolution - using technology for the good of humanity’. Prime Minister also interacted with the CEOs during the event.

P.M address (highlights)

- India’s ambition of self-reliance will strengthen globalism anew and will help in Industry 4.0
- India is working on all the four factors of Industry 4.0- connectivity, automation, artificial intelligence or machine learning and real-time data.
- India is among the countries where data charges are the cheapest and mobile connectivity and smart phones have reached far and wide.
- India’s automation design expert pool is vast and the country has made a mark in the field of AI and machine learning.

51st World Economic Forum Annual Meeting

- The 51st World Economic Forum Annual Meeting will be held on the theme “The Great Reset” representing a commitment to jointly and urgently build the foundations of the global economic and social system for a more fair, sustainable and resilient future.
- The Meeting will be organized in a “twin” format, being both in-person and virtual, connecting key global governmental and business leaders in Davos with a global multi-stakeholder network in 400 cities around the world for a forward-oriented dialogue driven by the younger generation.

World Economic Forum

- The World Economic Forum (WEF), is an international NGO established in 1971 as a not-for-profit foundation and is headquartered in Geneva, Switzerland.
- The WEF’s mission is stated as “committed to improving the state of the world by engaging business, political, academic, and other leaders of society to shape global, regional, and industry agendas”.
- It is independent, impartial and not tied to any special interests.
- The WEF hosts an annual meeting at the end of January in Davos, a mountain resort in Graubünden, in the eastern Alps region of Switzerland.
- The meeting brings together some 3,000 business leaders, international political leaders, economists, celebrities and journalists for up to five days to discuss global issues, across 500 sessions.
- The organization also convenes some six to eight regional meetings each year in locations across Africa, East Asia, Latin America, and India and holds two further annual meetings in China and the United Arab Emirates.
- Beside meetings, the organization provides a platform for leaders from all stakeholder groups from around the world – business, government and civil society – to collaborate on multiple projects and initiatives.
- It also produces a series of reports and engages its members in sector-specific initiatives.

The foundation also acts as a think tank, publishing a wide range of reports.

- The Global Competitiveness Report
- The Global Information Technology Report
- The Global Gender Gap Report
- The Global Risks Report
- The Global Travel and Tourism Report
- The Financial Development Report
- The Global Enabling Trade Report
- The Risk Response Network
- Nature Risk Rising

- In the year 2020, the forum published a report named: “**Nature Risk Rising**”.
- In this report the forum estimated that approximately half of the global GDP is dependent highly or moderately on nature and 1 dollar spent on nature restoration yields 9 dollars in profit.

Industry 4.0

- **Industry 4.0** is the current trend of automation and data exchange in **manufacturing** technologies.
- It includes cyber-physical systems, the Internet of things and cloud computing.
- **Industry 4.0** creates what has been called a “smart factory”.

Environment: National Marine Turtle Action Plan launched.

Relevance in – Prelims (about the Guidelines and Action Plan + about Marine turtle) + Mains (GS III Environment conservation)

What's the NEWS

- The Ministry of Environment Forest and Climate Change (MoEF&CC) has released ‘Marine Mega Fauna Stranding Guidelines’ and ‘National Marine Turtle Action Plan’

Know! the objective of these two documents (highlights)

- Marine habitats in India, marine mega fauna species and marine turtles face a wide variety of challenges including stranding and entanglement.
- Managing such challenging situations requires coordination, action and people’s participation which would help in the long-term conservation of marine species and their habitats.
- The documents contains ways and means to not only promote inter-sectoral action for conservation but also guide improved coordination amongst the government, civil society and all relevant stakeholders on the response to cases of stranding, entanglement, injury or mortality of marine mammals and also conservation of marine turtles.
- These two documents highlight actions to be taken for handling stranded animals on shore, stranded or entangled animals in the sea or on a boat, management actions for improved coordination, reducing threats to marine species and their habitats, rehabilitation of degraded habitats, enhancing people’s participation, advance scientific research and exchange of information on marine mammals and marine turtles and their habitats.

Know! about marine turtles

- Five species of sea turtles are known to inhabit Indian coastal waters and islands.
- These are the Olive Ridley (*Lepidochelys olivacea*), Green (*Chelonia mydas*), Hawksbill (*Eretmochelys imbricata*), Loggerhead (*Caretta caretta*) and the Leatherback (*Dermochelys coriacea*) turtles.
- Except the Loggerhead, the remaining four species nest along the Indian coast.
- Threats to marine turtles in India are many, and varied. Some of the major threats include unplanned beach development (including ports, lighting, tourism and plantations), by-catch mortality (in trawl nets and gill nets), weak enforcement of fisheries and Protected Area regulations and, to a limited extent, killing of turtles for meat and the poaching of eggs.
- The coastal state of Odisha on the eastern coast of India experiences one of the world’s largest mass nestings or arribada of the Olive Ridley turtle during the months of October to April.
- Three of the world’s major mass nesting beaches for this species are located in Odisha, supporting a nesting population of probably more than half a million Olive Ridleys, making this one of the most critical conservation areas for this species globally.

Environment: 2021: Year of Indo-French alliance towards a Greener Planet

Relevance in – Prelims (about the Indo-French Year of the Environment) + Mains (GS III Environment conservation + GS II bilateral relations)

What's the NEWS

- Minister for Environment, Forest and Climate Change, and the French Minister for Ecological Transition launched the Indo-French Year of the Environment



- The basic objective is to strengthen Indo-French cooperation in sustainable development, increase the effectiveness of actions in favor of global environment protection and give them greater visibility.

Know! about the Indo-French Year of the Environment

- The Indo-French Year of the Environment over the period 2021-2022 would be based on five main themes: environmental protection, climate change, biodiversity conservation, sustainable urban development, and the development of renewable energies and energy efficiency.
- It is also a platform for engaging in discussions on critical areas of collaboration relating to environment and allied areas.
- From the French side, it will be held under the aegis of the Ministry of Ecological Transition, in close collaboration with the Ministry of Europe and Foreign Affairs with the support of the Embassy of France in Delhi and its partners.
- From the Indian side, it will be coordinated by the Ministry of Environment, Forest and Climate Change (MoEFCC) along with the Ministry of External Affairs, Ministry of Housing and Urban Affairs, Ministry of New and Renewable Energy and other concerned Ministries/Departments/Organisations.
- A joint screening committee will also be set up to finalise the calendar of the events for the Indo-French Year of the Environment.

India's achievement

- India has made significant progress towards climate change action & has already achieved 26% of reduction of emission intensity.
- As of 2020 the renewable capacity in India stands at 90 GW which includes 36 GW of solar energy & 38 GW of wind energy.

Miscellaneous: NCAVES India Forum 2021



Relevance in – Prelims (about Natural Capital Accounting and Valuation of Ecosystem Services NCAVES + about SEEA + Mains (GS III Environment conservation) + GS II government policies and interventions + governance

What's the NEWS

- The NCAVES India Forum 2021, organised by the Ministry of Statistics and Programme Implementation (MoSPI) in a virtual format, with live sessions on January 14, 21 and 28, 2021, concluded on the January 28, 2021.
- The event covered a wide range of topics pertaining to the System of Environmental Economic Accounting (SEEA).
- There was a general consensus that the SEEA framework can be used effectively to enable decisions that can ensure sustainability.
- The efforts made by MoSPI to implement the SEEA using a modular approach were complimented by all dignitaries.
- The Forum witnessed the policy makers urging the statistical community to give greater impetus to the work of environmental accounting, since it could help make informed economic decisions.

National Issues: National Dialogue on “Indian Agriculture Towards 2030

Relevance IN – Prelims (about National Dialogue on “Indian Agriculture Towards 2030 – objective) + Mains (GS III farmers welfare)

What's the NEWS

- National Dialogue on “Indian Agriculture Towards 2030: Pathways for Enhancing Farmers’ Income, Nutritional Security and Sustainable Food Systems” organised jointly by NITI Aayog, Government of India’s Ministry of Agriculture and Farmers’ Welfare, and the Food and Agriculture Organisation (FAO) of the United Nations, all of whom are at the helm of policy-making on agriculture.
- The three-day dialogue to envision a roadmap for Indian Agriculture towards 2030 will see participation from agricultural experts, farmers, scientists, academics and civil society members.
- The delegates will examine the problems and challenges faced by Indian agriculture and will make suitable recommendations on how to overcome them and move forward.

INDIAN AGRICULTURE TOWARDS 2030

- It transformed India from a food-deficit nation to a food-surplus, export-oriented country.
- The national dialogue aims to complement efforts of the NITI Aayog and Ministry of Agriculture and Farmers’ Welfare (MoA&FW) in designing a post-Green Revolution future for the country.
- The NITI Aayog, Ministry of Agriculture and Farmers’ Welfare (MoA&FW) and the Food and Agriculture Organization of the United Nations (FAO) initiated a national dialogue in the country in 2019 for facilitating the transformation of India’s agriculture.
- The development of its design was an iterative process amongst NITI Aayog, officials of MoA&FW and FAO staff.
- A steering committee was formed with a dozen domain experts in the field of food and agriculture, representing a wide range of agricultural and allied sectors expertise. FAO functions as the working secretariat.
- The committee is chaired by Prof Ramesh Chand, renowned agricultural economist and Member, NITI Aayog.
- The committee has held six meetings through which its members agreed on the priority themes for the dialogue and through which preparations for the national conference were also undertaken.
- Papers have been commissioned to select authors on different thematic areas, which are listed below.
- These will form the basis of discussion. In the spirit of dialogue, new insights and ideas will be exchanged. The first round of the dialogue process will be held as virtual sessions from 19-22 January 2021.
- The second round of brainstorming will be held in mid-2021 to consolidate ideas and recommendations into ways forward for the next decade.

Government Schemes: PM releases financial assistance to over 6 lakh beneficiaries in UP under Pradhan Mantri Awaas Yojana – Gramin

Relevance IN – Prelims (about Pradhan Mantri Awas Yojana – Gramin) + Mains (GS II government policies and interventions)

What's the NEWS

- The Prime Minister, released financial assistance to over 6 lakh beneficiaries in UP under Pradhan Mantri Awas Yojana – Gramin

Pradhan Mantri Awas Yojana – Gramin

- Pradhan Mantri Gramin Awaas Yojana, previously Indira Awaas Yojana, is a social welfare programme, created by the Indian Government, to provide housing for the rural poor in India. A similar scheme for urban poor was launched in 2015 as Housing for All by 2022.
- The Mission provides Central Assistance to the implementing agencies through States/Union Territories (UTs) and Central Nodal Agencies (CNAs) for providing houses to all eligible families/ beneficiaries against the validated demand for houses for about 1.12 cr.
- As per PMAY(U) guidelines, the size of a house for Economically Weaker Section (EWS) could be upto 30 sq. mt. carpet area, however States/UTs have the flexibility to enhance the size of houses in consultation and approval of the Ministry.
- In continuation to this Government's efforts towards empowerment of women from EWS and LIG unlike earlier schemes, PMAY (U) has made a mandatory provision for the female head of the family to be the owner or co-owner of the house under this Mission.
- The scheme would be implemented in rural areas throughout India except Delhi and Chandigarh. The cost of houses would be shared between Centre and States.
- Objective -To provide pucca house to all who are houseless and living in dilapidated houses in rural areas by 2022.
- Under PMAY, the cost of unit assistance is to be shared between Central and State Governments in the ratio 60:40 in plain areas and 90:10 for North Eastern and hilly states.
- The unit assistance given to beneficiaries under the programme is Rs 1,20,000 in plain areas and to Rs 1,30,000 in hilly states/difficult areas /Integrated Action Plan (IAP) for Selected Tribal and Backward Districts.
- Presently the NE States, States of HP, J&K and Uttarakhand and all 82 LWE districts are identified as difficult and hilly areas. The unit size is 25 sq.m including a dedicated area for hygienic cooking.
- The beneficiary is entitled to 90 days of unskilled labour from MGNREGA.
- The beneficiary would be facilitated to avail loan of up to Rs.70,000/- for construction of the house which is optional.
- Funds will be transferred electronically directly to the account of the beneficiary.
- These houses are equipped with facilities such as toilet, LPG connection, electricity connection, and drinking water [convergence with other schemes e.g. Swachh Bharat Abhiyan toilets, Ujjwala Yojana LPG gas connection, Saubhagya Yojana electricity connection, etc.
- The construction of the houses is the sole responsibility of the beneficiary and engagement of contractors is strictly prohibited.
- Sanitary latrine and smokeless chullah are required to be constructed along with each IAY house for which additional financial assistance is provided from "Total Sanitation Campaign" and "Rajiv Gandhi Grameen Vidyutikaran Yojana" (Which is now subsumed by Deen Dayal Upadhaya Gram Jyoti Yojana) respectively.
- This scheme, operating since 1985, provides subsidies and cash-assistance to people in villages to construct their houses, themselves.

Food Processing Industries: First Ever Virtual Expo 2021 for R&D in Processed Food Sector Inaugurated

Relevance IN – Prelims (about the First Virtual Expo 2021- highlights) + Mains (GS III food processing industries)

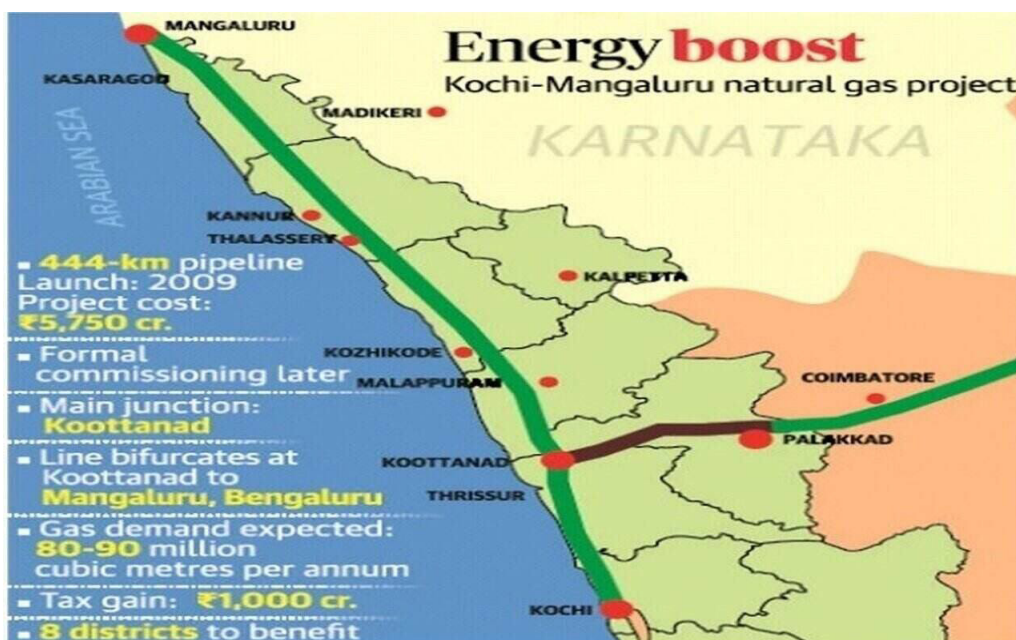
What's the NEWS

- MoFPI inaugurated the First Virtual Expo 2021 for R&D in processed food sector.
- Ministry of Food Processing Industries is organizing Virtual Expo 2021 for R&D in processed food sector from 20th to 22nd January 2021 for showcasing the outcomes of R&D Projects supported by the Ministry of premier Food Technology Institutions of India.
- The Ministry has also launched the R&D portal which will be available to all stakeholders.
- Research undertaken by institutions across the country will be available on this portal.
- About 200 research projects are available on the portal.
- This R&D portal launch will help in developing product and process technology, better packaging, value addition in food processing sector.

Know! about the expo highlights

- This expo is being organised under guidance of Union Minister for Food Processing Industries, Rural Development, Agriculture and Farmers Welfare and Panchayati Raj.
- MoFPI has been supporting R&D efforts in the sector not only through NIFTEM and IIFPT but also through institutions under ICAR and CSIR systems and agricultural universities.
- The Virtual Expo will showcase innovation and R&D in food processing sector by premier Food Technology Institutions of India such as NIFTE, IIFPT, CFTRI, ICAR, IITs.
- The key focus areas would be showcasing R&D projects consisting of categories like Novel Food Products, Innovations in Food Engineering, Food Safety & Quality Evaluations, Food Packaging Solutions & Food Industry Waste Utilization. Federation of Indian Chambers of Commerce & Industry (FICCI) is the Event Partner for this Expo.
- The Expo is an interactive platform designed to maximize networking efforts through Webinars, B2B meetings, one-to-one chats, informative material like e-brochures, visiting cards or other documents showcased digitally through virtual booth.

Infrastructure Development: Kochi-Mangaluru LNG pipeline inaugurated



Relevance IN – Prelims (about Kochi-Koottanad-Mangaluru natural gas pipeline + about LNG) + Mains (GS III infrastructure development – energy)

What's the NEWS

- Prime Minister dedicated the 450-km long Kochi-Koottanad-Mangaluru natural gas pipeline built and operated by GAIL India Ltd., to the nation

Kochi-Mangalore natural gas pipeline

- The regasified liquefied natural gas (RLNG) has already been flowing from Kochi LNG Terminal of Petronet LNG to Mangaluru (Mangalore Chemicals and Fertilisers Ltd) heralding a new era in clean and green energy sector.
- The 444 km-long Kochi-Mangalore natural gas pipeline will deliver liquefied natural gas (LNG) sourced from Kochi LNG Terminal operated by Petronet in Puthuvype, Kochi, India.
- Built in 2013, the terminal is South India's first LNG-receiving, regasification and re-loading terminal with a capacity of five million metric tonnes per annum.
- The natural gas is supplied as regasified LNG I (RLNG) through the pipeline of Gail Authority of India Limited (GAIL).
- GAIL's Pipeline is already supplying natural gas to MCF (Mangalore Chemicals and Fertilizers Ltd) and is expected to cater to 10 city gas distribution companies including OMPL and MRPL (ONGC Mangalore Petrochemicals Ltd and Mangalore Refinery and Petrochemicals Ltd respectively) paving the way for domestic piped natural gas (PNG) connections to households.

Know! about Liquefied Natural Gas (LNG)

- LNG, a non-toxic liquid, is natural gas that is cooled to a liquid state at about -162 C (-260 F) that shrinks the volume of the gas 600 times smaller. That makes it possible to transport natural gas to places far away from producing regions.
- It is turned back into a gas at regasification plants and then piped to distribution companies, industrial consumers, and power plants.
- LNG is now also emerging as a cost-competitive and cleaner transport fuel, especially for shipping and heavy-duty road transport

Know! about the Kochi-Mangaluru LNG Pipeline

- Launched in 2009, the pipeline has a transportation capacity of 12 million metric standard cubic metres per day.
- The pipeline will carry natural gas from the Kochi LNT terminal in Kerala through Ernakulam, Thrissur, Palakkad, Malappuram, Kozhikode, Kannur and Kasargod districts to Mangaluru in Dakshina Kannada district of Karnataka
- It will help India to achieve its target of 15% share of natural gas from current 6% and vision of "One Nation-one Gas Grid moving towards Gas based Economy"
- It connects four lakh houses in the Dakshina Kannada and Udupi districts in Coastal Karnataka region providing piped natural gas.

Know! about Petronet LNG Limited

- Petronet LNG Limited has set up the country's first LNG receiving and regasification terminal at Dahej Gujarat and another terminal at Kochi Kerala.
- While the Dahej terminal has a nominal capacity of 15 MMTPA the Kochi terminal has a capacity of 5 MMTPA.
- The company is in the process to build a third terminal at Gangavaram Andhra Pradesh.
- The Government of India in July of the year 1997 approved the formation of a Joint Venture Company (JVC) for securing competitive Liquefied Natural Gas (LNG) supply and for development of facilities for the import and utilization of LNG.
- The GAIL (India) Ltd (GAIL) Oil & Natural Gas Corporation Ltd (ONGC) Indian Oil Corporation Ltd (IOCL) and Bharat Petroleum Corporation Ltd (BPCL) formed Petronet LNG Limited as a Joint Venture company.
- Petronet LNG was incorporated in 2nd April of the year 1998 to import LNG and set up LNG terminals in the country.
- The Company successfully commissioned India's first LNG receiving and regasification terminal at Dahej in February of the year 2004.

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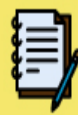
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