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## MAINS & PRELIMS

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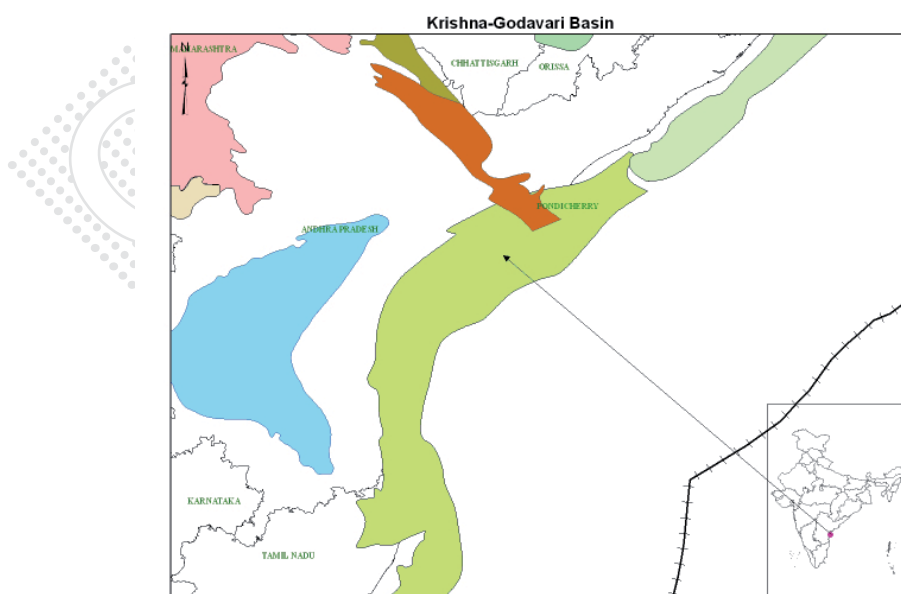
## 1 Krishna-Godavari (KG) basin

### CONTEXT:

- Krishna-Godavari (KG) basin, an excellent source of fuel methane

### ABOUT:

- As the world runs out of fossil fuels and looks out for alternate sources of clean energy, there is good news from the Krishna-Godavari (KG) basin. The methane hydrate deposit in this basin is a rich source that will ensure adequate supplies of methane, a natural gas.
- Methane is a clean and economical fuel. It is estimated that one cubic meter of methane hydrate contains 160-180 cubic meters of methane. Even the lowest estimate of methane present in the methane hydrates in KG Basin is twice that of all fossil fuel reserves available worldwide.
- In a recent study conducted by researchers at the Agharkar Research Institute (ARI), an autonomous institute of the Department of Science and Technology, Govt. of India have found that the methane hydrate deposits are located in the Krishna-Godavari (KG) basin are of biogenic origin.
- The study was conducted as a part of the DST-SERB young scientist project titled 'Elucidating the community structure of methanogenic archaea in methane hydrate'. Methane hydrate is formed when hydrogen-bonded water and methane gas come into contact at high pressures and low temperatures in oceans.
- According to the present study accepted for publishing in the journal 'Marine genomics', the ARI team has further identified the methanogens that produced the biogenic methane trapped as methane hydrate, which can be a significant source of energy.
- "The massive methane hydrate deposits of biogenic origin in the Krishna-Godavari (KG) basin and near the coast of Andaman and Mahanadi make it necessary to study the associated methanogenic community," said Dr. Vikram B Lanjekar, the Principal Investigator of the study.
- According to the ARI team, until recently, there have been only a few investigations of the methanogenic communities associated with methane hydrate-bearing sediments. This study has shown that methanogens under these elevated pressure and temperature conditions are well adapted to these conditions and are different in methane-producing activities.



**Krishna Godavari Basin:**

- ▶ It is a peri-cratonic passive margin basin in India. It is spread across more than 50,000 square kilometers in the Krishna River and Godavari River basins in Andhra Pradesh.
- ▶ The site is known for the D-6 block where Reliance Industries discovered the biggest natural gas reserves in India in 2003.
- ▶ KG inland and offshore basins have good prospects of tight oil and tight gas reserves from the conducted field studies. Most of the conventional wells drilled and operated have a shorter lifespan than envisaged life and with erratic production. This may be due to drilling of conventional wells in tight oil and gas fields without horizontal drilling in the shale rock formations and hydraulic fracturing.

**2****Mission Karmayogi****CONTEXT:**

- Cabinet approves "Mission Karmayogi"- National Programme for Civil Services Capacity Building (NPCSCB).

**Salient Features:**

- NPCSCB has been carefully designed to lay the foundations for capacity building for Civil Servants so that they remain entrenched in Indian Culture and sensibilities and remain connected, with their roots, while they learn from the best institutions and practices across the world.
- The Programme will be delivered by setting up an **Integrated Government Online Training-iGOTKarmayogi** Platform. The **core guiding principles** of the Programme will be:
  - Supporting Transition from 'Rules based' to 'Roles based' HR Management. Aligning work allocation of civil servants by matching their competencies to the requirements of the post.
  - To emphasize on 'on-site learning' to complement the 'off-site' learning,
  - To create an ecosystem of shared training infrastructure including that of learning materials, institutions and personnel,
  - To calibrate all Civil Service positions to a **Framework of Roles, Activities and Competencies (FRACs)** approach and to create and deliver learning content relevant to the identified FRACs in every Government entity,
  - To make available to all civil servants, an opportunity to continuously build and strengthen their **Behavioral, Functional and Domain Competencies** in their self-driven and mandated learning paths.
  - To enable all the Central Ministries and Departments and their Organizations to directly invest their resources towards co-creation and sharing the collaborative and common ecosystem of learning through an annual financial subscription for every employee,
  - To encourage and partner with the best-in-class learning content creators including public training institutions, universities, start-ups and individual experts,
  - To undertake data analytics in respect of data emitted provided by iGOT- Karmayogi pertaining to various aspects of capacity building, content creation, user feedback and mapping of competencies and identify areas for policy reforms.

## Objectives:

It is also proposed to set up a **Capacity Building Commission**, with a view to ensure a uniform approach in managing and regulating the capacity building ecosystem on collaborative and co-sharing basis.

The role of Commission will be as under-

- To assist the PM Public Human Resources Council in approving the Annual Capacity Building Plans.
- To exercise functional supervision over all Central Training Institutions dealing with civil services capacity building.
- To create shared learning resources, including internal and external faculty and resource centers.
- To coordinate and supervise the implementation of the Capacity Building Plans with the stakeholder Departments.
- To make recommendations on standardization of training and capacity building, pedagogy and methodology
- To set norms for common mid-career training programs across all civil services.
- To suggest policy interventions required in the areas of HR Management and Capacity Building to the Government.

## 3 Swachhta Pakhwada

### CONTEXT:

- Department of Fertilizers is observing Swachhta Pakhwada from 1st to 15th September 2020.

### ABOUT:

- Swachhta pakhwada is a fortnight initiative to carry on the agenda of Swachh Bharat Mission, aimed at promoting cleanliness.
- Swachhata Pakhwada started in April 2016 with the objective of bringing a fortnight of intense focus on the issues and practices of Swachhata by engaging GOI Ministries/Departments in their jurisdictions.

Some of the major activities undertaken during Swachhta Pakhwada are: -

- All officials of MNRE took "Swachhata Pledge". T-Shirts reflecting Swachhata logo and Cleaning Kits were distributed among the Ministry staff.
- Various innovative ways were used for promotion of Swachhata message through posters, banners, hoardings, pamphlets etc.
- Tree plantation drive was undertaken by the Ministry officials for Swachh Paryavaran (clean environment) in the Central Government Organisations (CGO) Complex on 4th June 2019.
- MNRE cleaned and repaired two public toilets near CGO Complex and these two toilets will be regularly cleaned and maintained throughout the year by the Ministry.
- Ministry Organised a Seminar on Biogas/Biomass- Waste to Energy to sensitize the officers and employees about the importance of maintaining personal & environmental hygiene. The seminar was attended by officials from several institutions.
- Special drive was launched for cleaning and upkeep of offices including common area premises, toilets, stairs, lifts etc and weeding out of old files/records.

**Swachh Bharat Mission (SBM):**

- ▶ It is a country-wide campaign initiated by the Government of India in 2014 to eliminate open defecation and improve solid waste management (SWM). Phase 1 of the mission lasted till October 2019. Phase 2 will be implemented between 2020-21 and 2024-25.
- ▶ Initiated by the Government of India, the mission aimed to achieve an "open-defecation free" (ODF) India by 2 October 2019, the 150th anniversary of the birth of Mahatma Gandhi.
- ▶ The objectives of the first phase of the mission also included eradication of manual scavenging, generating awareness and bringing about a behavior change regarding sanitation practices, and augmentation of capacity at the local level.
- ▶ The second phase of the mission aims to sustain the open defecation free status and improve the management of solid and liquid waste.

**4****MoU between India and Finland for cooperation in the field of Geology and Mineral Resources****CONTEXT:**

- The Union Cabinet chaired by the Prime Minister, Shri Narendra Modi has approved Memorandum of Understanding for cooperation in the field of geology and mineral resources between Geological Survey of India, Ministry of Mines, the Government of the Republic of India and Geological Survey of Finland, Ministry of Employment and the Economy, the Government of Finland.

**ABOUT:**

- The MoU facilitates cooperation in the field of geology, training, mineral prognostication and suitability analysis, 3/4D modeling, Seismic and other Geophysical surveys finalised with the intent of reinforcing and strengthening scientific links between the two Organisations.
- This MoU aims to provide with a framework and a platform to promote and foster cooperation in the fields of geology, and mineral resources between the Participants for mutual economic, social and environmental benefit; and share experiences on geological data management and information dissemination to promote exploration and mining, in the areas of geology and mineral resources.
- Geological Survey of India (GSI) is a premier geo-scientific organisation of the Government of India of international repute for creation and updation of national geoscientific information and mineral resource assessment.
- These objectives are achieved through, ground surveys, air-borne and marine surveys, mineral prospecting and investigations, multi-disciplinary geoscientific, geo-technical, geo-environmental and natural hazards studies, glaciology, seismotectonic study, and carrying out fundamental research.
- Geological Survey of Finland has expertise in multi-thematic data integration and analysis using spatial platform with special emphasis on 3/4D modeling for mineral prognostication, hazard management, environmental impact assessment, and other areas of socio-economic significance and developing Decision Support System which can be used by users with minimal knowledge of GIS based modelling.



### The Geological Survey of India (GSI):

- It is a scientific agency of India.
- It was founded in 1851, is a Government of India Ministry of Mines organisation, one of the oldest of such organisations in the world and the second oldest survey in India after Survey of India (founded in 1767), for conducting geological surveys and studies of India, and also as the prime provider of basic earth science information to government, industry and general public, as well as the official participant in steel, coal, metals, cement, power industries and international geoscientific forums.

5

## Australia-India-Japan Economic Ministers' Joint Statement on Supply Chains Resilience

### ABOUT:

Following is the text of the Joint Ministerial Statement adopted during the Trilateral Ministerial Meeting on supply chain resilience held on 1.9.2020.

- The Ministers reaffirmed their determination to take a lead in delivering a free, fair, inclusive, non-discriminatory, transparent, predictable and stable trade and investment environment and in keeping their markets open.
- In light of the COVID-19 crisis and the recent global-scale changes in the economic and technological landscape, the Ministers underscored the necessity and potential to enhance the resiliency of supply chains in the Indo-Pacific region.
- Recognizing the pressing need for regional cooperation on supply chain resilience in the Indo-Pacific, the Ministers shared their intention to work toward the launch of a new initiative to achieve the objective through cooperation.
- They instructed their officials to promptly work out the details of the new initiative for its launch later this year. The Ministers noted the important role of business and academia in realizing the objective.
- The Ministers called for other countries in the region, which share the afore-mentioned views, to participate in the initiative."

6

## Jal Jeevan Mission

### CONTEXT:

- Jal Jeevan Mission promotes research and development

### ABOUT:

- Jal Jeevan Mission is being implemented in partnership with States, to enable every household in villages to have functional household tap connection by 2024.
- This Mission aims at ensuring potable water supply in adequate quantity (@ the rate of 55 litres per person per day) and of prescribed quality to every rural household on regular and long-term basis.

- On completion of 1<sup>st</sup> year of Jal Jeevan Mission, announced by the Prime Minister in his Independence Day address to the nation on 15th August, 2020; in the whole country, 2 Crore households have been provided tap water connection in this period. More than 1 lakh families are given tap water connections daily.
- The rural drinking water supply is a complex subject with various social, environmental and technical challenges like geo-genic and anthropogenic water quality issues, long-term potable water supply in harsh edapho-climatic conditions and disaster-prone areas, measurement and monitoring of water service delivery, behaviour change management, cost-effective grey-water treatment and reuse etc.
- Thus, given the challenges and the knowledge gaps being faced while implementing the Jal Jeevan Mission with speed and scale along with the future of rural water security, there is a pressing need for significant research and innovation in the water supply sector.
- Now, more than ever, National Jal Jeevan Mission will be supporting, promoting and cultivating research and innovation to solve the issue faced by water supply sector in rural areas.
- National Jal Jeevan Mission is inviting proposals from young innovators, researchers, academia, entrepreneurs, and start-ups working in this sector to provide cost-effective solutions and fill knowledge gaps.
- Further, the Department/ National Mission/ SWSM will conduct action research and concurrent evaluation studies for adopting evidence-based technical intervention to manage rural water supply efficiently, effectively and economically.
- These R&D projects under Jal Jeevan Mission will facilitate in building partnership with scientists and R&D institutions, innovators, entrepreneurs and create useful knowledge that will help in addressing various challenges in the drinking water sector so as to improve the lives of people.

## 7

## G20 Member Countries Reaffirm Commitment to Ensuring Education Continuity and Safety for all

### CONTEXT:

- In a virtual meeting G20 Education Ministers resolve to work together in the areas of Education Continuity, Early Childhood Education and Internationalization in Education

### ABOUT:

- Education Ministers of G 20 nations have resolved to work together and share best practices in the area of education so that member countries can ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, even in times of crises.
- A virtual meeting of G20 Education Ministers was held to discuss and share experiences of member countries in the three identified areas of Education Continuity in Times of Crises, Early Childhood Education and Internationalization in Education. Yesterday's meeting was the culmination of ongoing discussions on these themes, conducted virtually due to the Covid 19 pandemic.
- The Education Ministers adopted a communique at the end of the meeting. Regarding ensuring education continuity in times of crises, the communique recognizes the value of distance and blended teaching and learning and underscore the importance of enhancing access to high-quality education, professional development for educators, digital infrastructure and content, cybersecurity awareness, appropriate teaching methodologies and active learning, while recognizing that these approaches complement face-to-face learning. The importance of research and data to assess the learning outcomes and quality of distance learning has also been stressed.

- On the importance of Early Childhood Education (ECE) the communique emphasizes the importance of improving the accessibility and affordability of quality ECE for all children, especially those in vulnerable groups. It also stresses on the need to raise family and community awareness of the vital role of quality ECE that is delivered in accordance with children's developmental needs at each stage.
- The communique expresses the resolve to encourage internationalization in education by sharing of best practices in education and the adaptation of such practices at the local, national, and international levels, as appropriate.
- It also supports advancing the discussion on internationalization at the K-12 level. The communique emphasizes the impact of internationalization practices in a country in broadening students' intercultural and global competencies and in providing equal learning opportunities and experiences for all.
- The Kingdom of Saudi Arabia is hosting G-20 Leaders' Summit in 2020.

#### **The G20 (or Group of Twenty) :**

- ▶ It is an international forum for the governments and central bank governors from 19 countries and the European Union (EU).
- ▶ Founded in 1999 with the aim to discuss policy pertaining to the promotion of international financial stability, the G20 has expanded its agenda since 2008 and heads of government or heads of state, as well as finance ministers and foreign ministers, have periodically conferred at summits ever since. It seeks to address issues that go beyond the responsibilities of any one organization.
- ▶ Membership of the G20 consists of 19 individual countries plus the European Union. The EU is represented by the European Commission and by the European Central Bank.
- ▶ Collectively, the G20 economies account for around 90% of the gross world product (GWP), 80% of world trade (or, if excluding EU intra-trade, 75%), two-thirds of the world population, and approximately half of the world land area.

## **8 National Bamboo Mission**

### **CONTEXT:**

- Union Minister for Agriculture and Farmers' Welfare Shri Narendra Singh Tomar launches 22 bamboo clusters in 9 States.

### **ABOUT:**

- The restructured National Bamboo Mission was launched in 2018-19 for holistic development of the complete value chain of the sector.
- The Mission is being implemented in a hub (industry) and spoke model, with the main goal of connecting farmers to markets so as to enable farmer producers to get a ready market for the bamboo grown and to increase supply of appropriate raw material to domestic industry.
- The Mission was launched as a natural corollary of the historic amendment of the Indian Forest Act in 2017, removing bamboo from the definition of trees, hence bamboo grown outside forests no longer need felling and transit permissions.
- The bamboo ecosystem has been energized with 23 States being assisted, including all the 8 States of North East. 10 most important species which are required by industry have been identified and quality planting material is being made available to farmers for plantations.

- Assam has already engaged FPOs for raising plantations. New FPOs will also be formed under the recently approved scheme of DACFW for formation of 10,000 FPOs in 5 years. Further primary processing, CFCs are being set up close to the plantations which will enable cost of transportation of whole bamboo to be reduced, increase local entrepreneurship and move to a zero waste approach.
- These will be engaged in raising nurseries and plantations and/or product development like furniture, agarbatti, venetian blinds, chopsticks, toothbrush, lifestyle products, jewellery, bottles, yoga mat, charcoal, etc.
- Together with industrial products, the National Bamboo Mission also endeavors to upgrade skills of traditional bamboo craftsmen as per requirement of contemporary markets with tie up with enterprises and premier institutes so that our cultural heritage is continued.
- The Sector Skill Councils established under National Skill Development Agency will also impart skills and Recognition of Prior Learning to traditional artisans. This will also encourage the youth to carry forward their family traditions.
- The winner of the logo contest, Shri Sai Ram Goudi Edigi of Telengana was selected from 2033 entries received on MyGov platform from across the country. The logo portrays a bamboo culm in the center of a circle composed of half an industrial wheel and half farmers, depicting the objectives of NBM appropriately. The green and yellow colour of the logo symbolise bamboo often termed as green gold.

## 9

**Matsya Sampada Yojana****CONTEXT:**

- PM launched Pradhan Mantri Matsya Sampada Yojana

**ABOUT:**

- The Pradhan Mantri Matsya Sampada Yojana (PMMSY) is a flagship scheme for focused and sustainable development of fisheries sector in the country with an estimated investment of Rs. 20,050 crores for its implementation during a period of 5 years from FY 2020-21 to FY 2024-25 in all States/Union Territories, as a part of Aatma Nirbhar Bharat Package.
- The investment of Rs. 20,050 crores under PMMSY is the highest ever in the fisheries sector. Out of this, an investment of about Rs 12340 crores is proposed for beneficiary-oriented activities in Marine, Inland fisheries and Aquaculture and about Rs 7710 crores investment for Fisheries Infrastructure.
- PMMSY aims at enhancing fish production by an additional 70 lakh tonne by 2024-25, increasing fisheries export earnings to Rs.1,00,000 crore by 2024-25, doubling of incomes of fishers and fish farmers, reducing post-harvest losses from 20-25% to about 10% and generation of additional 55 lakhs direct and indirect gainful employment opportunities in fisheries sector and allied activities.
- PMMSY is designed to address critical gaps in fish production and productivity, quality, technology, post-harvest infrastructure and management, modernization and strengthening of value chain, traceability, establishing a robust fisheries management framework and fishers' welfare.
  - While aiming to consolidate the achievements of Blue Revolution Scheme, PMMSY envisages many new interventions such as fishing vessel insurance, support for new/up-gradation of fishing vessels/boats, Bio-toilets, Aquaculture in saline/alkaline areas, Sagar Mitras, FFPOs/Cs, Nucleus Breeding Centres, Fisheries and Aquaculture start-ups, etc.
- PMMSY scheme primarily focuses on adopting 'Cluster or Area based approaches' and creation of Fisheries clusters through backward and forward linkages. Special focus will be given for employment generation activities such as seaweed and ornamental fish cultivation. It emphasizes on interventions for quality brood, seed and feed, special focus on species diversification, critical infrastructure, marketing networks etc.

### Other inaugurations related to Fisheries sector:

- Prime Minister will announce the establishment of Fish Brood Bank at Sitamarhi, and of Aquatic Disease Referral Laboratory at Kishanganj, for which assistance has been provided under PMMSY.
- These facilities will help in enhancing production and productivity of fish by ensuring timely availability of quality and affordable fish seed for the fish farmers and address the need for disease diagnosis as well as water and soil testing facilities.
- He will inaugurate one-unit fish feed mill at Madhepura and two units of 'Fish on Wheels' assisted at Patna under Blue Revolution. He will also interact with the beneficiaries on the occasion.
- Prime Minister will also inaugurate the Comprehensive Fish Production Technology Centre at Dr. Rajendra Prasad Central Agricultural University, Pusa, Bihar. The Center, with facilities for Seed production technology and demonstration unit technology for fish, referral laboratory and diagnostic testing, will facilitate in boosting fish production and assist in capacity building of fish farmers.

### e-Gopala App

- e-Gopala App is a comprehensive breed improvement marketplace and information portal for direct use of farmers.
- At present no digital platform is available in the country for farmers managing livestock including buying and selling of disease free germplasm in all forms (semen, embryos, etc); availability of quality breeding services (Artificial Insemination, veterinary first aid, vaccination, treatment etc) and guiding farmers for animal nutrition, treatment of animals using appropriate ayurvedic medicine/ethno veterinary medicine.
- There is no mechanism to send alerts (on due date for vaccination, pregnancy diagnosis, calving etc) and inform farmers about various government schemes and campaigns in the area. The e-Gopala App will provide solutions to farmers on all these aspects.

10

## Aatmanirbhar Bharat ARISE-ANIC Initiative

### CONTEXT:

- Atal Innovation Mission (AIM), NITI Aayog, launched one of its most awaited programmes, the Aatmanirbhar Bharat ARISE-Atal New India Challenges, to spur applied research and innovation in Indian MSMEs and startups.

### ABOUT:

- The programme will be driven by Indian Space Research Organization (ISRO), four ministries—Ministry of Defence; Ministry of Food Processing Industries; Ministry of Health and Family Welfare; and Ministry of Housing and Urban Affairs—and associated industries to facilitate innovative solutions to sectoral problems.
- The Aatmanirbhar Bharat ARISE-ANIC programme will support deserving applied research-based innovations by providing funding support of up to Rs 50 lakh for speedy development of the proposed technology solution and/or product.
- Other than ISRO, which is a great promoter of technology, Indian departments and big companies never encourage and promote new startups that have done unique work.

- For ARISE-ANIC's success, the government must become the first buyer.

## 11 Five Star Villages Scheme

### CONTEXT:

- India Post launched Five Star Villages Scheme to ensure 100% rural coverage of postal schemes

### ABOUT:

- The Department of Posts has launched a scheme called Five Star Villages, to ensure universal coverage of flagship postal schemes in rural areas of the country.
- The scheme seeks to bridge the gaps in public awareness and reach of postal products and services, especially in interior villages.
- All postal products and services will be made available and marketed and publicized at village level, under the Five Star Villages scheme. Branch offices will function as one-stop shop to cater all post office - related needs of villagers.
- The schemes covered under the Five Star scheme include:
  - Savings Bank accounts, Recurrent Deposit Accounts, NSC / KVP certificates,
  - Sukanya Samridhi Accounts/ PPF Accounts,
  - Funded Post Office Savings Account linked India Post Payments Bank Accounts,
  - Postal Life Insurance Policy/Rural Postal Life Insurance Policy and
  - Pradhan Mantri Suraksha Bima Yojana Account / Pradhan Mantri Jeevan Jyoti Bima Yojana Account.
- If a village attains universal coverage for four schemes from the above list, then that village gets four-star status; if a village completes three schemes, then that village get three-star status and so on.
- The Postal Department has been playing a major role in the implementation of Government schemes, leveraging the immense strength of its vast network. Postal schemes are known for providing highly secured deposits, they provide higher return of interest with low risk.

## 12 17<sup>th</sup> Shanghai Cooperation Organization (SCO) Culture Ministers' Meeting

### Context:

- Union Minister of State (I//C) for Culture and Tourism , participated in the 17<sup>th</sup> Shanghai Cooperation Organization (SCO) Culture Ministers' Meeting held on September 10, 2020.

### ABOUT:

- Discussion was held on the role and place of culture during the global epidemiological crisis and on the prospects for developing multilateral cultural cooperation within the SCO.
- The Minister of State for Culture addressed participants of the meeting and presented India's perspective to strengthen the cultural cooperation within SCO by using digital technology as an
- Effective medium for dissemination and awakening with regard to customs, culture and traditions in the prevailing conditions.



- One of the important aspects that unites and connects Shanghai Cooperation Organization countries to each other is shared heritage of Buddhist philosophy and art.
- To promote the mutual bonding, the National Museum of India is in process of organizing the first SCO Exhibition on Shared Buddhist Heritage this year. The Exhibition marks India's Chairpersonship of Council of Heads of Government this year.
- At the end of the meeting Protocol of the 17<sup>th</sup> Meeting of the SCO Ministers of Culture was agreed upon and signed by all the representatives of Member States.

### **The Shanghai Cooperation Organisation (SCO) :**

- ▶ It is a Eurasian political, economic, and security alliance, the creation of which was announced on 15 June 2001 in Shanghai, China by the leaders of China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan; the Shanghai Cooperation Organisation Charter, formally establishing the organisation, was signed in June 2002 and entered into force on 19 September 2003.
- ▶ The original five nations, with the exclusion of Uzbekistan, were previously members of the Shanghai Five group, founded on 26 April 1996.
- ▶ Since then, the organisation has expanded its membership to eight countries when India and Pakistan joined SCO as full members on 9 June 2017 at a summit in Astana, Kazakhstan.
- ▶ The Heads of State Council (HSC) is the supreme decision-making body in the SCO, it meets once a year and adopts decisions and guidelines on all important matters of the organisation.
- ▶ Military exercises are also regularly conducted among members to promote cooperation and coordination against terrorism and other external threats, and to maintain regional peace and stability.
- ▶ The SCO is the largest regional organisation in the world in terms of geographical coverage and population, covering three-fifths of the Eurasian continent and nearly half of the human population.

## **13 73<sup>rd</sup> Session of WHO South East Asia Region**

### **CONTEXT:**

- Member States adopt Declaration on the collective response to COVID-19 in South-East Asia Region.

### **ABOUT:**

- At the conclusion of the 73rd session of WHO South East Asia Region held under the Chairmanship of Mr. Anutin Charnvirakul, Deputy Prime Minister and Minister of Health, Thailand, the Health Ministers of the member states agreed to the SEAR Member States' Declaration on the collective response to COVID-19 in South-East Asia Region which are as follow:
  - Strive to sustain essential health services and public health programs, in particular during public health emergencies and to use this opportunity to build back better our health systems;
  - Prioritize health of the population and saving lives by allocating adequate health budget to sustain uninterrupted health services during and after the pandemic;
  - Strengthen health information systems which capture timely reporting of outbreaks by leveraging digital technologies, and sharing information for policy decision;

- Ensure occupational health, safety and wellbeing of health professionals and other related workers, strengthen safety of patients and the people through adequate public health and social measures, and access to different types of quality personal protective devices;
- Strengthen occupational and environmental safety through appropriate medical waste management system;
- Strengthen biomedical, health policy and systems research on COVID-19 which support national policy decision, and knowledge sharing across SEAR Member States;
- Continue and expand multi-sectoral collaboration, through a whole of government and society approach, to mobilize surge capacity in the society to mitigate the negative consequences of the pandemic; including effective risk communication, community engagement, and management of the infodemic;
- Strengthen regional collaboration to support SEAR Member States in particular strengthening capacity for preparedness, surveillance and rapid response, field epidemiology training, supply chain management of medicines and medical supplies, and regional stockpiling of essential health resources;
- Identify gaps and strengthen core capacities as required by the International Health Regulations 2005;
- Fully engage in global discussion on equitable allocation of vaccines, medicines and diagnostics;

## 14

## Quality education in Rural Areas

**CONTEXT:**

- Initiatives taken by government to ensure quality education in Rural Areas

**ABOUT:**

- The Government of India has launched SamagraShiksha - an Integrated Scheme for school education, w.e.f. 2018-19, which is an overarching programme for the school education sector extending from pre-school to class XII and aims to ensure inclusive and equitable quality education at all levels of school education.
- It envisages the 'school' as a continuum from pre-school, primary, upper primary, secondary to senior secondary levels and subsumes the three erstwhile centrally sponsored schemes i.e. Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and Teacher Education (TE).
- Bridging gender and social category gaps at all levels of school education is one of the major objectives of the scheme. The scheme reaches out to girls and children belonging to Scheduled Caste (SC), Scheduled Tribe (ST), minority communities and transgender.
- The scheme also gives attention to urban deprived children, children affected by periodic migration and children living in remote and scattered habitations. Under the scheme, provision has been made for giving preference to Special Focus Districts (SFDs), Educationally Backward Blocks (EEBs), LWE affected districts, and aspirational districts while planning interventions like setting up of primary schools, upper primary schools, construction of additional classrooms, toilets, Kasturba Gandhi BalikaVidyalayas (KGBVs).
- A comprehensive initiative called **PM eVIDYA** has been initiated which unifies all efforts related to digital/online/on-air education to enable multi-mode access to education. This will benefit nearly 27 crore school going children across the country. The initiative includes, where work is in progress.



- DIKSHA the nation's digital infrastructure for providing quality e-content for school education in states/UTs: and QR coded Energized Textbooks for all grades (one nation, one digital platform)
- One earmarked TV channel in SWAYAM PRABHA per class from 1 to 12 (one class, one channel)
- SWAYAM Portal, E-PATHASHALA, extensive use of Radio, Community radio and CBSE Podcast-ShikshaVani
- Special e-content for visually and hearing impaired developed on Digitally Accessible Information System (DAISY) and in sign language on NIOS website/ YouTube.

## 15 Global Innovation Index

### CONTEXT:

- India ranked in the top 50 nations in the Global Innovation Index

### ABOUT:

- India has climbed 4 spots and has been ranked 48<sup>th</sup> by the World Intellectual Property Organization in the Global Innovation Index 2020 rankings. In midst of the Covid -19 pandemic, it comes as an uplifting news for India, and is a testament of its robust R&D Ecosystem.
- India was at the 52<sup>nd</sup> position in 2019 and was ranked 81<sup>st</sup> in the year 2015. It is a remarkable achievement to be in a league of highly innovative developed nations all over the globe.
- The WIPO had also accepted India as one of the leading innovation achievers of 2019 in the central and southern Asian region, as it has shown a consistent improvement in its innovation ranking for the last 5 years.
- The consistent improvement in the global innovation index rankings is owing to the immense knowledge capital, the vibrant startup ecosystem, and the amazing work done by the public & private research organizations.
- The scientific ministries like the Department of Science and Technology, the Department of Biotechnology and the Department of space have played a pivotal role in the enriching the national innovation Ecosystem.
- The NITI Aayog has been working tirelessly to ensure optimization of national efforts in this direction by bringing policy led innovation in different areas such as EVs, biotechnology, Nano technology, Space, alternative energy sources, etc.
- The India Innovation Index, which was released last year by the NITI Aayog, has been widely accepted as the major step in the direction of decentralization of innovation across all the states of India. A constant thrust in monitoring and evaluating India's position in global rankings has been provided by the NITI Aayog, including the global innovation index.
- India must aim high and double its efforts in improving its ranking in the global innovation index. The call for Aatma Nirbhar Bharat by the Hon'ble Prime Minister could only be realized if India punches above its weight class and compete with global superpowers in developing scientific interventions.
- It is time that India brings a paradigm shift and aims to be in the top 25 countries in the next global innovation index rankings.

**The Global Innovation Index (GII) :**

- ▶ It is an annual ranking of countries by their capacity for, and success in, innovation.
- ▶ It is published by Cornell University, INSEAD, and the World Intellectual Property Organization, in partnership with other organisations and institutions, and is based on both subjective and objective data derived from several sources, including the International Telecommunication Union, the World Bank and the World Economic Forum.
- ▶ The index was started in 2007 by INSEAD and World Business, a British magazine. The GII is commonly used by corporate and government officials to compare countries by their level of innovation.
- ▶ The GII is computed by taking a simple average of the scores in two sub-indices, the Innovation Input Index and Innovation Output Index, which are composed of five and two pillars respectively. Each of these pillars describe an attribute of innovation, and comprise up to five indicators, and their score is calculated by the weighted average method.

**16****Streamlining Grant of Approvals for Oil Exploration****ABOUT:**

- A Committee headed by Vice-chairman, NITI Aayog and comprising of Cabinet Secretary, Chief Executive Officer, NITI Aayog, Secretary, Ministry of Petroleum and Natural Gas, Secretary, Department of Economic Affairs and Chairman & Managing Director of Oil and Natural Gas Corporation was constituted in October, 2018 for suggesting reforms in Exploration & Production (E&P) Sector to enhance domestic Oil & Gas Exploration and Production.
- The Committee, in its report *inter-alia* recommended constitution of an Empowered Coordination Committee (ECC) under the chairmanship of Cabinet Secretary for streamlining and expediting grant of approval/clearances.
- Empowered Coordination Committee (ECC) was constituted in May, 2019 under the Chairmanship of Cabinet Secretary, for considering matters relating to delay in granting various clearances, approvals etc.
- Three meetings of the committee have been held so far and issues related to delay/non-grant of Petroleum Exploration Licenses, environmental clearance issues and defence clearance issues have been taken up with other Ministries/departments and State Governments for expeditious resolution of the pending issues.
- Pursuant to the ECC meetings, following steps have been taken:-
  - Petroleum Exploration Licenses (PELs) have been granted in all Blocks awarded under Open Acreage Licensing Policy Round-I in the states of Assam, Madhya Pradesh, Gujarat & some blocks of Arunachal Pradesh,
  - Petroleum Mining Leases have been granted for many Discovered Small Fields and Nomination blocks in Assam, Tripura, Gujarat and Andhra Pradesh,
  - Ministry of Defence and Department of Space have agreed to grant additional area for exploration,
  - Notification of Eco Sensitive Zone (ESZ) has already been issued around 16 protected areas.

## 17 Hypersonic Technology Demonstrator Vehicle

### CONTEXT:

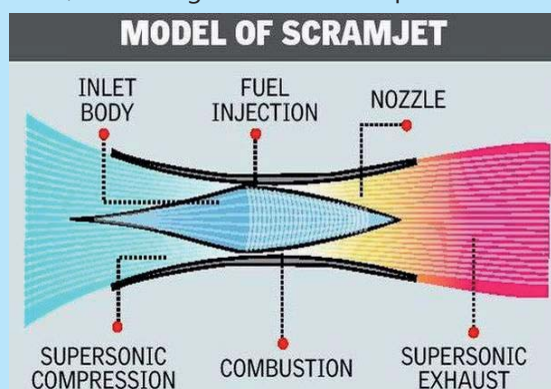
- Defence Research and Development Organisation (DRDO) has successfully demonstrated the hypersonic air-breathing scramjet technology with the flight test of Hypersonic Technology Demonstrator Vehicle (HSTDV) at 1103 hours from Dr APJ Abdul Kalam Launch Complex at Wheeler Island, off the coast of Odisha .

### ABOUT:

- The hypersonic cruise vehicle was launched using a proven solid rocket motor, which took it to an altitude of 30 kilometres (km), where the aerodynamic heat shields were separated at hypersonic Mach number. The cruise vehicle separated from the launch vehicle and the air intake opened as planned.
- The hypersonic combustion sustained and the cruise vehicle continued on its desired flight path at a velocity of six times the speed of sound i.e., nearly 02 km/second for more than 20 seconds. The critical events like fuel injection and auto ignition of scramjet demonstrated technological maturity. The scramjet engine performed in a text book manner.
- The parameters of launch and cruise vehicle, including scramjet engine was monitored by multiple tracking radars, electro-optical systems and Telemetry Stations.
- The scramjet engine worked at high dynamic pressure and at very high temperature. A Ship was also deployed in the Bay of Bengal to monitor the performance during the cruise phase of hypersonic vehicle. All the performance parameters have indicated a resounding success of the mission.
- With this successful demonstration, many critical technologies such as aerodynamic configuration for hypersonic manoeuvres, use of scramjet propulsion for ignition and sustained combustion at hypersonic flow, thermo-structural characterisation of high temperature materials, separation mechanism at hypersonic velocities etc. were proven.

### How scramjet works:

- ▶ A ramjet operates by combustion of fuel in a stream of air compressed by the forward speed of the aircraft itself, as opposed to a normal jet engine, in which the compressor section (the fan blades) compresses the air. The air flow through a ramjet engine is subsonic, or less than the speed of sound. Ramjet-propelled vehicles operate from about Mach 3 to Mach 6.
- ▶ A scramjet (supersonic-combustion ramjet) is a ramjet engine in which the airflow through the engine remains supersonic, or greater than the speed of sound. Scramjet powered vehicles are envisioned to operate at speeds up to at least Mach 15. Ground tests of scramjet combustors have shown this potential, but no flight tests have surpassed the Mach 9.6 X-43A flight.



**18****Indigenous device developed to prevent Blood Clot****CONTEXT:**

- Indigenous device developed by SCTIMST of Deptt of S&T can help prevent blood clot in deep vein and lowers cost of saving life threatening conditions.

**ABOUT:**

- The formation of a blood clot in a deep vein, usually in the legs or Deep Vein Thrombosis (DVT), can lead to life threatening complications. Scientists have come up with a device that can facilitate flow of blood from the veins in the legs thus preventing DVT.
- The device can bring relief to patients affected by prolonged immobility, bed ridden state, post-operative immobilization, paralysis of legs, a large number of whom are affected by DVT causing pain, swelling, redness, warmth and engorged surface veins. The detachment of the clot and its transport to the arteries carrying impure blood to the lungs can cause 'pulmonary artery embolism', a potentially life-threatening complication.
- A team from Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum (SCTIMST), an autonomous institute of the Department of Science and Technology, Government of India has developed a device for the prevention of DVT.
- Such devices which are so far imported cost between 2 lakh to 5 lakh rupees whereas the device developed by SCTIMST team can be placed in the market for less than 1 lakh rupees.
- The newly developed device works by compressing the veins in the legs in sequence so that the flow of blood from the veins in the legs is facilitated. The compression pressure is set in such a way that the veins are compressed but not the arteries. It is equipped with closed loop monitoring of compression pressure and also has controls through valves which are driven by an electronic circuit.
- A dedicated software and a control circuit are provided in the device to ensure that safe compression levels are always maintained. The device is also equipped with a power supply back-up in case of power failure.

**19****FDI in Defence Sector****CONTEXT:**

- Government has brought in significant reforms to promote FDI in Defence sector in the country, to complement and supplement the domestic investment.

**ABOUT:**

- In May, 2001, the Defence Industry sector, which was hitherto reserved for the public sector, was opened up to 100% for Indian private sector participation, with Foreign Direct Investment (FDI) up to 26% both subject to licensing.
- Further, Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry allowed FDI under automatic route upto 49% and above 49% through government route wherever it was likely to result in access to modern technology or for other reasons to be recorded.
- Through FDI, domestic companies are benefited by way of enhanced access to supplementary capital and state-of-art-technologies, and also exposure to global managerial practices resulting in employment generation and accelerated growth of the sector. Review of FDI policy is an ongoing

process and changes are made in the FDI policy regime, from time to time, to ensure that India remains an attractive investment destination.

- The Government of India in May 2020 has announced that the FDI limit in Defence Production will be raised to 74% from existing 49% under Automatic Route as part of the reform in defence sector to boost self-reliance.
- It has been proposed to enhance the FDI in Defence Sector up to 74% through the Automatic Route for companies seeking new defence industrial license and up to 100% by Government Route wherever it is likely to result in access to modern technology or for other reasons to be recorded.

**The Government has taken the following policy initiatives to promote 'Make in India' in defence sector: -**

- ▶ A new category of capital procurement 'Buy (Indian-IDDM (Indigenously Designed, Developed and Manufactured))' has been introduced in Defence Procurement Procedure (DPP)-2016 to promote indigenous design and development of defence equipment. It has been accorded top most priority for procurement of capital equipment.
- ▶ The 'Make' Procedure of capital procurement has been simplified. There is a provision for funding of 90% of development cost by the Government to Indian industry under Make-I category. In addition, there are specific reservations for MSMEs under the 'Make' procedure.
- ▶ Separate procedure for 'Make-II' category (Industry funded) has been notified under DPP to encourage indigenous development and manufacture of defence equipment.
- ▶ Under 'Atmanirbhar Bharat' campaign of Government of India, Ministry of Defence (MoD) has prepared a list of 101 items for which there would be an embargo on the import beyond the timeline indicated against them. This would offer a great opportunity to the Indian defence industry to manufacture these items using their own design and development capabilities to meet the requirements of the Armed Forces in the coming years.
- ▶ An innovation ecosystem for Defence titled Innovations for Defence Excellence (iDEX) has been launched in April 2018. iDEX is aimed at creation of an ecosystem to foster innovation and technology development in Defence and Aerospace by engaging Industries including MSMEs, Start-ups, Individual Innovators, R&D institutes and Academia and provide them grants/funding and other support to carry out R&D which has potential for future adoption for Indian defence and aerospace needs.
- ▶ Government has notified the 'Strategic Partnership (SP)' Model in May 2017, which envisages establishment of long-term strategic partnerships with Indian entities through a transparent and competitive process, wherein they would tie up with global Original Equipment Manufacturers (OEMs) to seek technology transfers to set up domestic manufacturing infrastructure and supply chains.
- ▶ Government has notified a 'Policy for indigenisation of components and spares used in Defence Platforms' in March 2019 with the objective to create an industry ecosystem which is able to indigenize the imported components (including alloys & special materials) and sub-assemblies for defence equipment and platform manufactured in India.
- ▶ An Inter-Governmental Agreement (IGA) on "Mutual Cooperation in Joint Manufacturing of Spares, Components, Aggregates and other material related to Russian/Soviet Origin Arms and Defence Equipment" was signed during the 20<sup>th</sup> India-Russia Bilateral Summit in Sep 2019.
- ▶ In Feb 2018, Government decided to establish two defence industrial corridors to serve as an engine of economic development and growth of defence industrial base in the country.

**CONTEXT:**

- Finance Minister unveils Doorstep Banking Services and declares EASE 2.0 Index Results

**ABOUT:**

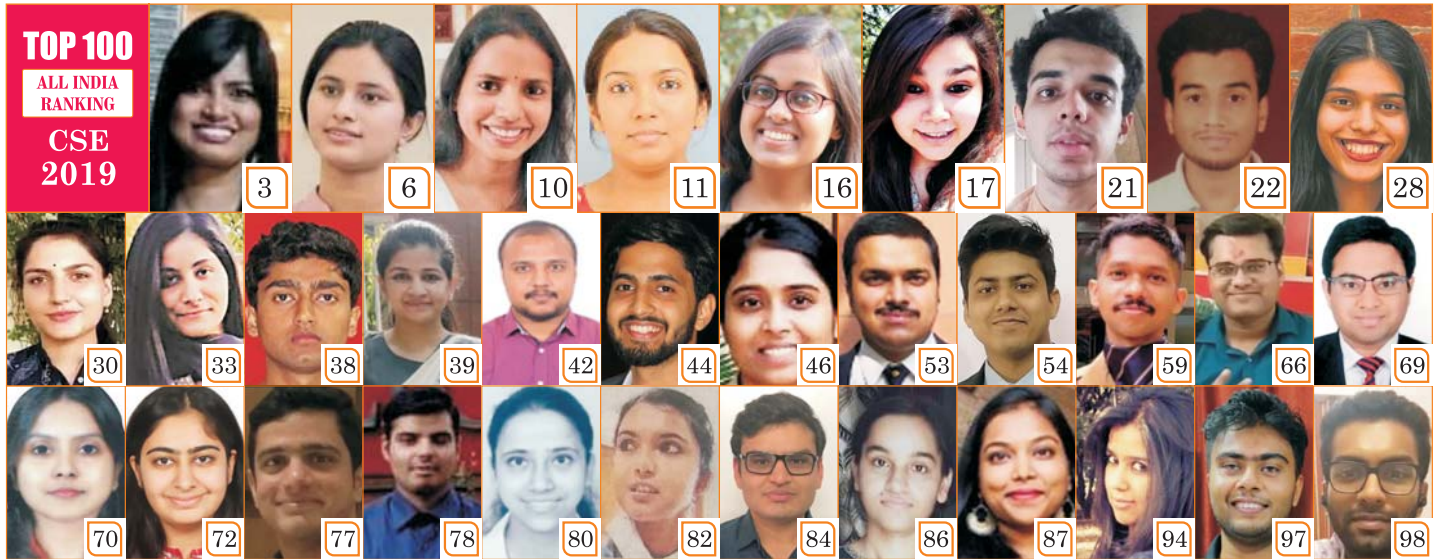
- Union Minister of Finance & Corporate Affairs Smt. Nirmala Sitharaman inaugurated Doorstep Banking Services by PSBs and participated in the awards ceremony to felicitate best performing banks on EASE Banking Reforms Index.
- As part of the EASE Reforms, Doorstep Banking Services is envisaged to provide convenience of banking services to the customers at their door step through the universal touch points of Call Centre, Web Portal or Mobile App. Customers can also track their service request through these channels.
- The services shall be rendered by the Doorstep Banking Agents deployed by the selected Service Providers at 100 centres across the country.
- The services can be availed by customers of Public Sector Banks at nominal charges. The services shall benefit all customers, particularly Senior Citizens and Divyangs who would find it at ease to avail these services.

**Performance of PSB on EASE 2.0 Index**

- A common reform agenda for PSBs, EASE Agenda is aimed at institutionalizing clean and smart banking. It was launched in January 2018, and the subsequent edition of the program — EASE 2.0 built on the foundation laid in EASE 1.0 and furthered the progress on reforms.
- Reform Action Points in EASE 2.0 aimed at making the reforms journey irreversible, strengthening processes and systems, and driving outcomes.
- PSBs have shown a healthy trajectory in their performance over four quarters since the launch of EASE 2.0 Reforms Agenda.
- The overall score of PSBs increased by 37% between March-2019 and March-2020, with the average EASE index score improving from 49.2 to 67.4 out of 100.
- Significant progress is seen across six themes of the Reforms Agenda, with the highest improvement seen in the themes of 'Responsible Banking', 'Governance and HR', 'PSBs as Udyamimitra for MSMEs', and 'Credit off-take'.

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