



# WEEKLY CURRENT AFFAIRS

**JUNE, 2022**

**Week-1**

**1-7 June, 2022**

★★ Useful for ★★

**CSE, ESE, PSUs, State Services Exams,  
SSC and Banking Exams**

1<sup>st</sup> JUNE 2022

## World's Fastest Supercomputer

- **Context:** "Frontier", a supercomputer built by the U.S. Department of Energy's Oak Ridge National Laboratory (ORNL) has become the fastest supercomputer in the world.

### Key Highlights

- Frontier has outperformed "Fugaku" built by Japan, which previously held top position according to the Top500 list of world's most powerful supercomputers.
- It has reached Linmark benchmark score of 1.1 exaflops, making it the world's first supercomputer to break the exascale speed barrier.
- Fugaku, now in second position, has a Linmark benchmark score of 442 petaflops.
- 1 exaflop is equivalent to 1,000 petaflops.
- Frontier is also ranked number one as the world's most energy-efficient supercomputer, on the Green500 list.
- Three of India's Supercomputers are in the Top500 list of fastest supercomputers in the world.
- Pratyush, Mihir and PARAM -Siddhi are three supercomputers of India in the Top500 list.

## Liquid Nano Urea

- **Context:** Prime Minister Narendra Modi inaugurated India's first Liquid nano urea plant in Kalol, Gujarat.

### About Liquid Nano Urea (LNU)

- Urea is a chemical nitrogen fertilizer used to provide artificial nitrogen to the plants.
- Liquid Nitrogen Urea is nanotechnology-based urea in which nanoparticles of nitrogen are used to provide nutrients to plants.
- It is directly sprayed on the leaves and gets absorbed by the plant easily due to the nano size of nitrogen particles.

## Advantages over conventional Urea

- Bio-availability of LNU to plants is more because of its desirable particle size about 20-50 nm, more surface area and number of particles.
- According to IFFCO, liquid nano urea contains 4 per cent total nitrogen (w/v) evenly dispersed in water.
- There is targeted supply of nutrients to crops, as it is sprayed directly on leaves which is then by the stomata, pores found on the epidermis of leaves.

### Significance of LNU

- The liquid nano urea produced by IFFCO Limited comes in a half-litre bottle priced at Rs 240 without subsidy while farmer pays Rs 300 for a 50-kg bag of heavily subsidized urea.
- According to IFFCO, a bottle of the nano urea can effectively replace at least one bag of urea.
- Apart from reducing the country's subsidy bill, it is aimed at reducing the unbalanced and indiscriminate use of conventional urea.
- It will help increase crop productivity, and reduce soil, water, and air pollution.

## RBI Annual Report

- **Context:** The Reserve Bank of India (RBI) released the RBI Annual Report 2021-22.

### Key Highlights

- **Future Path of Growth:** It stressed that the future path of growth would be conditioned by addressing supply-side bottlenecks, calibrating monetary policy to bring down inflation and boosting capital spending.
- **Impact of Russia-Ukraine War:** The immediate impact of geopolitical aftershocks is on inflation. The elevation in international prices of crude, metals and fertilisers has translated into a term of trade shock that has widened trade and current account deficits.
- **Slow Recovery Concerns:** High-frequency indicators already point to some loss of momentum in the recovery that has been gaining traction from the second quarter of 2021-22.

- **RBI on Excise Duty Cut, Curbs on Exports:** RBI further said supply-side policy interventions such as removing customs duty on import of raw cotton, prohibiting wheat exports, reducing road and infrastructure cess (RIC) on petrol etc. have provided some offset.
- **GDP Estimates:** RBI's Monetary Policy Committee had revised downwards real GDP growth for 2022-23 to 7.2 per cent mainly due to higher oil prices weighing on private consumption and higher imports reducing net exports.

2<sup>nd</sup> JUNE 2022

## Green Bonds

- **Context:** Power Finance Corporation of India listed 300 million euros green bonds on Luxembourg Stock Exchange (LSE).

### About Green Bonds

- Green bonds are fixed-income financial instruments which are used to fund projects that have positive environmental and or climate benefits.
- They are like any regular bond with the key difference that money raised from investors is exclusively used for finance projects that have a positive impact on the environment such as renewable energy and green buildings.
- The US is the largest source of green bonds but the European market is also growing very fast with issuance of \$300 billion coming up in the next five years.

### About Luxembourg Green Exchange (LGX)

- LGX is the world's first dedicated green stock exchange.
- The LGX is the world's largest green bond exchange and lists 50% of the world's green bonds.
- Investors can freely access the documentation of the underlying green or sustainable products, and thus make informed decisions.

## Service charge

- **Context:** The Department of Consumer Affairs (DoCA) has announced that it will soon come up with a robust framework to ensure strict compliance by the stakeholders.

### Key issues

- As per the Ministry of Consumer affairs, hotels and restaurants charge tips from customers "without their express consent in the name of service charges" amounts to unfair trade practice.
- It said that the bill "may clearly display that service charge is voluntary, and the service charge column of the bill may be left blank for the customer to fill up before making payment."
- While National Restaurant Association of India (NRAI) said that there is no illegality in levying such a charge and information regarding the amount of Service Charge is mentioned/displayed by Restaurants on their menu cards so that customers are well aware of this charge before availing the services,"

### About Service charge

- A restaurant bill in India comprises food charge (from the menu), with an addition of service charge (anywhere between 5 to 15 per cent) and a 5 per cent GST on this amount (IGST+SGST).
- In case a restaurant is located inside a hotel wherein room rate is upwards of Rs 7,500 (mostly in case of five-stars), the GST would be 18 per cent.
- While the GST is a mandatory component as per law, it is the service charge which is supposed to be optional.

### About Service tax

- Service tax is a tax levied by the government on service providers on certain service transactions, but is actually borne by the customers.
- It is categorized under Indirect Tax and came into existence under the Finance Act, 1994.
- It is charged to the individual service providers on a cash basis, and to companies on an accrual basis.

## Government e-marketplace

- **Context:** Government has approved cooperatives as buyers in e-marketplace.

### Key Highlights

- The move will help over 8.54 lakh registered cooperatives and their 27 crore members as they would get products at competitive rates from the GeM portal.
- The GeM will provide technological infrastructure to support new users, as well as aid cooperatives with onboarding and transaction journeys, via available contact centers, in-field training and other support services.

### About Government e-marketplace

- Government e-Marketplace (GeM) is a one stop portal to facilitate online procurement of common use Goods & Services required by various Government Departments / Organizations / PSUs.
- GeM aims to enhance transparency, efficiency and speed in public procurement.
- It provides the tools of e-bidding, reverse e-auction and demand aggregation to facilitate the government users achieve the best value for their money.
- All Central government and State Government Ministries/Departments including its attached/subordinate offices, Central and State autonomous bodies, Central and State Public Sector Units and local bodies etc. are authorized to make procurement through GeM portal.

3<sup>rd</sup> JUNE 2022

## International Liquid Mirror telescope

- **Context:** India has set up its first-ever 'liquid mirror telescope' at Devasthal Observatory in Uttarakhand.

### Key Highlights

- India has set up its first Liquid Mirror telescope in Devasthal observatory in Uttarakhand.

- It became the world's first liquid-mirror telescope to be commissioned for astronomy.
- Only a handful of liquid-mirror telescopes have been previously built but were majorly used either for tracking satellites or for military purposes
- It will observe asteroids, supernovae, space debris and all other celestial objects.
- ILMT will be the third telescope facility to come up at Devasthal.
- The major instrumentation funding was jointly provided by Canada and Belgium while India will be responsible for the operations and upkeep of the telescope.
- The Liquid Mirror Telescope set up by India in Collaboration with Belgium, Canada, Poland and Uzbekistan was designed and built at the Advanced Mechanical and Optical Systems Corporation and the Centre Spatial de Liège in Belgium.

### About ILMT

- The liquid-mirror telescopes, on the other hand, are stationary telescopes that image a strip of the sky which is at the zenith at a given point of time in the night
- Conventional telescopes have highly polished glass mirrors — either single or a combination of curved ones — that are steered in a controlled fashion to focus onto the targeted celestial object on specific nights. The light is then reflected to create images.
- It has about 50 L of mercury-filled into a container which is rotated at a fixed constant speed along the vertical axis of the ILMT.
- Following the circular motions, the mercury in the container spreads and forms a thin layer in the container forming a paraboloid-shaped reflecting surface which then acts as the mirror.
- With a diameter of 4 meter, the surface is ideal to collect and focus light.

## Faceless Regional Transport Offices

- **Context:** Maharashtra government on Thursday launched 'Faceless Regional Transport Offices' (RTOs)

### Key Highlights

- It is launched to help citizens avail facilities linked to the transportation sector in the online mode.
- The RTOs have also been set up to save paper and speed-up the process.
- Nearly 20 lakh people used to visit the offices of the transport department for these services.
- Using RTOs people won't need to visit transport department offices.
- These faceless services will be Aadhar based so there is no chance of duplication or cheating,"
- The applicant will have to enroll himself through Aadhar number verification using OTP sent on the registered mobile number.
- After verification from the Aadhar portal, the application will be processed. Six important services will be made available online.
- The applicants will not have to come to RTOs for the same.
- The six documents that will be provided are Secondary Registration Certificate, No Objection Certificate, Change of Address on Registration Certificate, Renewal of Driving License, Change of Address on License and Renewal of License.

## Agriculture Land Price Index

- **Context:** IIM-Ahmedabad (IIM-A) in collaboration with an e-marketplace for agricultural land, Farms India, is set to develop a farm land price index.

### Key Highlights

- Farm land price index based on the sales and purchases done on the platform.
- The index has been designed to record and present the "quality-controlled" data on prices of agricultural land in the country.

- The index will track the price movements in the marketplace (SfarmsIndia) and come up with a composite pricing mechanism on a monthly basis, which will be updated twice a year.
- The index will not have any correlation with circle rates but will use the prices quoted in the online marketplace as their base value for research.
- According to IIM-A, the index will be a reliable source in benchmarking land prices in rural and semi-urban areas and help in signaling the conversion of agricultural land into real estate.

### Significance of Index

- Given the complexity of developing an index for land parcels due to price differences, the index has been prepared to address the disparities and ensure accuracy.
- With more data, the index is expected to offer a superior representation of the national context and a more granular index at regional levels.
- The index will benefit stakeholders across the spectrum including policymakers, local governments, environmentalists, investors, real estate developers, and financiers.
- The index can be used by local governments to compensate people who lose land for highway expansion.

4<sup>th</sup> JUNE 2022

## Tiangong space station

- **Context:** Three of Chinese astronauts entered the orbiting module of Tiangong space station.

### Key highlights

- China sent another manned mission to its new space station by Shenzhou 14 mission.
- This is the third crewed mission during the construction of the space station, which China plans to have fully crewed and operational by December 2022.

- The team will live and work at the Tiangong Space Station's Tianhe core module for six months before returning to Earth in December.
- This is the third crewed mission during the construction of the space station, which China plans to have fully crewed and operational by December 2022.
- The first crewed mission, a three-month stay by three other astronauts, was completed in September 2021.
- The second, Shenzhou-13, saw three astronauts spend six months in space for the first time.
- Once there is a Proof of Concept (PoC), then they can go for certification from FAA and EASA.
- FAA is the United States' Federal Aviation Administration while EASA is the European Union Aviation Safety Agency.

### About eVTOL Aircraft

An electric vertical take-off and landing (eVTOL) aircraft is a variety of VTOL (vertical take-off and landing) aircraft that uses electric power to hover, take off, and land vertically.

### About Tiangong Space station

- Tiangong means Heavenly Palace.
- It is a space station built by China in Near Earth orbit between 350 to 450 km.
- Tiangong space station is an under-construction orbiter started by China after the US barred Beijing from participating in the International Space Station.
- Following the current mission, China will launch one of the station's lab components in July and the second in October.
- Once Tiangong is complete, China will be the only country to operate a space station of its own

### eVTOL Aircrafts

- **Context:** Union minister of civil aviation Jyotiraditya M Scindia pitches to bring eVTOL aircrafts in India.

### Key Highlights

- The government is looking to bring Electric Vertical Takeoff and Landing (eVTOL) aircraft makers into the Indian market and explore the possibility of setting up a manufacturing base for such aircraft.
- Civil Aviation Minister Jyotiraditya Scindia has asked Beta Technologies, which has a partnership with Blade group, to explore the Indian market for eVTOLs.
- Blade already has a presence in India with its helicopter services.
- eVTOLs are being deployed by the US Air Force and the Canadian Air Force.

5<sup>th</sup> JUNE 2022

### Jan Samarth Portal

- **Context:** Prime Minister Modi launched the Jan Samarth Portal for credit linked government schemes.

### Key Highlights

- According to the Prime Minister's Office (PMO), Jan Samarth Portal is a one-stop digital portal linking government credit schemes.
- It is a first of its kind platform which directly connects beneficiaries to lenders.
- Under the portal 13 government schemes are linked on a single platform.
- The main purpose of the portal is to encourage inclusive growth and development of various sectors by guiding and providing them with the right type of government benefits through simple and easy digital processes.
- The portal ensures end-to-end coverage of all the linked schemes.
- The new portal will roll out easy loans under 12-13 government schemes.
- Under the portal 13 governmental schemes will ensure ease in credit availability to youth, entrepreneurs and farmers.
- Types of loan available: Education loan, Agri infrastructure loan, Business activity loan, livelihood loan.

## Eco-sensitive Zones

- **Context:** The Supreme Court has directed that every protected forest, national park and wildlife sanctuary across the country should have a mandatory eco-sensitive zone (ESZ) of a minimum one km starting from their demarcated boundaries.

### Key Highlights

- The court has made the Principal Chief Conservator of Forests (PCCF) and the home secretary of each state responsible for proper compliance of the order.
- The PCCFs have been directed to make a list of subsisting structures within the respective ESZs and submit a report before the court within a period of three months.
- The farmers will have to obtain permission from the forest department for constructing residential buildings only.
- Commercial establishments and quarrying will be banned.
- The new order will restrict construction of hotels, and commercial establishments.
- The order does not say anything about the sanctuaries for which notification has been issued.
- The implementation of the order will affect the livelihood of around 1 lakh families.

## SHRESTHA Scheme

- **Context:** Union Minister of social Justice and empowerment Dr. Virendra Kumar launched the Scheme "SHRESHTA"-Scheme for residential education for students in High school in Targeted Areas.

### Key Provisions

- The Scheme for Residential Education for Students in Targeted Areas (SHRESHTA) has been formulated with the objective to provide quality education and opportunities for the poorest Scheduled Caste students, as per the Constitutional mandate.

- Scheme provides for high quality education for meritorious but poor SC students in CBSE-affiliated reputed residential schools across the country.
- Approximately 3,000 seats are provided each year for admission in class 9th and 11th and the entire cost of the school fee and residential charges are borne by the Department.
- The students, belonging to Scheduled Castes, studying in class 8th and 10th in the current academic year are eligible for availing the benefits of scheme are selected through a transparent mechanism through a National Entrance Test for SHRESHTA (NETS), which is conducted by the National Testing Agency (NTA) for admission in class 9th and 11th.
- Students belonging to marginalized income groups within the SC community, whose parental annual income is upto Rs.2.5 Lakh are eligible.
- Successful candidates, after following the e-counselling process, are given admission in the school of their choice anywhere in the Country for their academic persuasion.
- The Department shall bear the total cost of the school fee and hostel charges till completion of their academic upto class 12th.
- Thereafter the students of the scheme may avail benefits of other schemes of the Department for their higher education.

6<sup>th</sup> JUNE 2022

## Blackfoot tribe

- **Context:** Canadian Prime Minister Justin Trudeau signed a Can\$1.3 billion (US\$1.0 billion) deal -- one of the largest of its kind - to settle a Blackfoot Tribe's century-old land claim.

### Key Highlights

- Canadian Prime Minister Justin Trudeau has signed a Can \$1.3 billion (962m) deal to settle a Blackfoot tribe's century-old land claim.

- The government took almost half of the tribe's reserve lands in Alberta province in 1910 to use for resource development and to sell to settlers.
- The land grab came even though the 115,000 acres (46,000 hectares) in the western prairies region had been secured for the community in a treaty 30 years earlier.
- Under the settlement, the Siksika may acquire over time lands for addition to their reserve, to make up for those surrendered in 1910.

### About Blackfoot Tribe

- The Blackfoot tribe is a group of people who ranged across large areas of the northern Great plains of western North America and spoke the Algonquian language.
- There are three sub-tribes: the Siksika, the Kainah, and the Piegan residing in northern great plains.

### eSanjeevani

- **Context:** According to National Health Authority (NHA) government's 'eSanjeevani' telemedicine service has been integrated with the Ayushman Digital Mission (ABDM).

### Key Highlights

- This integration allows the existing eSanjeevani users to easily create their Ayushman Bharat Health Account (ABHA) and use it to link and manage their existing health records.
- The users would also be able to share their health records with doctors on eSanjeevani leading to better clinical decision making and ensuring the continuum of care.
- 22 crore ABHA holders can link and store their health records created via eSanjeevani in the health lockers of their choice.
- ABDM aims to build digital highways to bridge the gaps in existing digital health solutions and stakeholders in India.

### About eSanjeevani

- eSanjeevani is a first of its kind online OPD service offered by government to its citizens.
- It aims to provide healthcare services to patients in their homes.
- Safe & structured video based clinical consultations between a doctor in a hospital and a patient in the confines of his home are being enabled.
- eSanjeevaniOPD is developed by Centre for Development of Advanced Computing (C-DAC) in Mohali.
- Salient features of this citizen friendly web-based National Teleconsultation Service (eSanjeevani OPD) are:
  - Patient registration
  - Token Generation
  - Queue Management
  - Audio-Video Consultation with a Doctor
  - ePrescription
  - SMS/Email Notifications
  - Serviced by State's Doctors
  - Free Service
  - Fully configurable (no. of daily slots, no. of doctors/clinics, waiting room slots, consultation time limit, etc).

### About Ayushman Bharat Digital Mission

- The Ayushman Bharat Digital Mission (ABDM) aims to develop the backbone necessary to support the integrated digital health infrastructure of the country.
- It will bridge the existing gap amongst different stakeholders of healthcare ecosystem through digital highways.
- Vision: To create a national digital health ecosystem that supports universal health coverage in an efficient, accessible, inclusive, affordable, timely and safe manner, that provides a wide-range of data, information and infrastructure services, duly leveraging open, interoperable, standards-based digital systems, and ensures the security, confidentiality and privacy of health-related personal information.

## Stockholm+50 Conference

- **Context:** The Stockholm+50 meeting was held to commemorate 50 years of the first global meeting held in the Swedish capital on the human environment.

### Key Highlights

- Stockholm+50 international conference being held in Stockholm, Sweden.
- Kenya and Sweden were co-host of the conference.
- It marked the 50th anniversary of the 1972 UN Conference on the Human Environment (also referred to as the Stockholm Conference).
- This year's event is titled "Stockholm+50: A healthy planet for all — our responsibility, our opportunity."
- Leaders of the world discussed how the next 50 years would be handled with emergency measures.
- The conference concluded with a statement that underlined the need for policies to promote phase out of fossil fuels and encourage sustainable lifestyles.
- The Conference ended with calls for bold actions to speed up the execution of the SDGs and the 2030 Agenda.
- The Stockholm+50 statement reiterated the point of sustainable consumption.
- India has been demanding that a climate finance commitment of \$100 billion be met by developed nations and climate finance be enhanced in view of the delay in acting on the climate crisis.

### About Stockholm Conference

- The United Nations conference on the Environment in Stockholm, Sweden was the first world conference to make the environment a major issue.
- The conference for the first time was held in Stockholm for 11 days starting from June 5th to June 16th, 1972.
- The theme was 'Only One Earth,' and it centered on the concept of living in a sustainable way in harmony with nature.
- The conference was attended by 122 countries.
- The participant adopted Stockholm declaration and Action Plan for Human Environment.
- The talk in 1972 was about environmental toxicity since the water and air were polluted.

7<sup>th</sup> JUNE 2022

## Environment Performance Index

- **Context:** India has scored the lowest among 180 countries in the 2022 Environmental Performance Index (EPI).

### Key findings

- With a score of 18.9, India ranked at 180th spot.
- India was ranked 168th in EPI-2020, with a score of 27.6.
- Bottom five nations included-India, Pakistan, Bangladesh, Vietnam and Myanmar.
- India has also scored low on rule of law, control of corruption and government effectiveness.
- Top five nations included- Denmark, UK, Finland, Malta, Sweden.
- The report stated that, a number of important countries in the Global South, including India and Nigeria, come out near the bottom of the rankings. T
- Their low EPI scores indicate the need for greater attention to the spectrum of sustainability requirements, with a high-priority focus on critical issues such as air and water quality, biodiversity, and climate change.

### About EPI

- The EPI is a biennial index and was started in 2002 as Environmental Sustainability Index.
- It is prepared by the World Economic Forum in collaboration with the Yale Center for Environmental Law and Policy and the Columbia University Center for International Earth Science Information Network.
- It uses 40 performance indicators across 11 issue categories.
- EPI ranks 180 countries on climate change performance, environmental health, and ecosystem vitality.
- These indicators provide a gauge at a national scale of how close countries are to established environmental policy targets.

## NASA's DAVINCI Mission

- **Context:** NASA will launch a mission named DAVINCI that will both fly by to Venus and descend through its harsh atmosphere in 2029.

### Key Features

- The DAVINCI stands for Deep Atmosphere Venus Investigation of Noble gases, Chemistry, and Imaging.
- DAVINCI will be the first mission to Venus to incorporate science-driven fly-bys and an instrumented descent sphere into a unified architecture.
- DAVINCI has the goal of measuring the landscapes of Venus at scales ranging from 328 feet down to finer than one meter.
- It has been designed to act as a flying analytical chemistry laboratory and will analyze Venus' temperature, atmosphere and also click a few photos of its trip.
- It will also measure the amount of oxygen present near the surface of the planet.
- This will be made possible by Venus Oxygen Fugacity (VfOx), a small, button-sized sensor.
- VfOx will be designed, fabricated, tested, operated, and analyzed by undergraduate and graduate students as the mission's Student Collaboration Experiment.
- Understanding how much oxygen is contained in Venus' atmosphere will be important in preparation for characterizing Venus-like worlds beyond our solar system.

