



# WEEKLY CURRENT AFFAIRS



**OCTOBER, 2021**

**Week-1**

**01-07 Oct, 2021**

*Useful for*

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

1<sup>st</sup> OCTOBER 2021

## Pradhan Mantri POSHAN Scheme

- The Cabinet Committee on Economic Affairs (CCEA) has approved the continuation of the 'National Scheme for PM POSHAN in Schools' for the five year period 2021-22 to 2025-26.
- This is a Centrally-Sponsored Scheme which covers all school children studying in Classes I-VIII of Government, Government-Aided Schools. The earlier name of the scheme was 'National Scheme for Mid Day Meal in Schools' popularly known as Mid Day Meal Scheme.
- The scheme covers about 11.80 crore children studying in 11.20 lakh schools across the country. During 2020-21, Government of India invested more than Rs 24,400 crore in the scheme, including a cost of about Rs 11,500 crore on foodgrains.
- Total budget of the scheme is 1,30,795 crore rupees.

### About PM-POSHAN scheme

- PM POSHAN is a revamped version of "Mid-Day Meal Scheme", which stands for "PM Poshan Shakti Nirman". With the new nomenclature, Centre has initiated a major political push towards 'child nutrition'.
- This scheme will cover around 24 lakh students, who are receiving pre-primary education at government schools and government-aided schools, from the year 2022.
- The scheme will be extended to students studying in pre-primary or Balvatikas running in government and government aided primary schools.

#### ■ NOTE:

Balvatika is the pre-school that was started in government schools last year to include children aged younger than six years in the formal education system.

## NASA's Lucy Mission

- NASA's Lucy Mission would be sent on a 12 year journey to the Planet Jupiter. The mission of the spacecraft would be to study the Trojan Asteroid for initial life traces on Earth. The American Space Agency, NASA, is set to send its first spacecraft to study Jupiter's Trojan asteroids.
- Mission Lucy will be launched with the objective of investigating the group of rocky bodies that are circling the Sun in two swarms- one preceding Jupiter and the other trailing behind it.
- Spacecraft will be launched from "Cape Canaveral Space Force Station, Florida" on October 16, 2021.

### About Mission:

- NASA's Lucy mission would include three Earth gravity assists and visits to eight asteroids called Jupiter's Trojan.
- Lucy would take off from the Earth on October 16 aboard the Atlas V 401 rocket. The lift off would take place at 3:04 pm IST. The viewers who wish to watch the take off can watch it through the link shared by NASA.
- The mission was conceived seven years ago as a mission to two asteroids. However, it was expanded to many proportions, now that it would be covering seven asteroids.

#### ■ NOTE:

Trojans are small celestial bodies or asteroids, sharing the orbit of larger one. They remain in a stable orbit, nearly 60° ahead or behind the main body.

## Shanti Swarup Bhatnagar Award 2021

- Shanti Swarup Bhatnagar Prize for science and technology 2021, were announced during the 80th foundation day of the Council for Scientific and Industrial Research (CSIR).

- The Shanti Swarup Bhatnagar (SSB) award has been named after the founder & Director of CSIR, Dr Shanti Swarup Bhatnagar. It is given to scientists for their outstanding contributions to science and technology, every year.

### Recipients of award in 2021

- **Biological Sciences category:** Dr Amit Singh and Dr Arun Kumar Shukla
- **Chemical sciences category:** Dr Kanishka Biswas and Dr T Govindaraju
- **Earth, Atmosphere, Ocean and Planetary Sciences category:** Dr Binoy Kumar Saikia
- **Engineering Sciences category:** Dr Debdeep Mukhopadhyay
- **Mathematical Sciences category:** Dr Anish Ghosh and Dr Saket Saurabh
- **Medical Sciences:** Dr Jeemon Panniyammakal and Dr Rohit Srivastava
- **Physical Sciences:** Dr Kanak Saha

### About the SSB prize

- The award is named after the Founder-Director of the Council of Scientific & Industrial Research (CSIR) India, the late Dr (Sir) Shanti Swarup Bhatnagar and is known as the 'Shanti Swarup Bhatnagar (SSB) Prize for Science and Technology'.
- The Prize is given each year by CSIR in the fields namely, Biological Sciences, Chemical Sciences, Earth, Atmosphere, Engineering Sciences, Mathematical Sciences, Medical Sciences, and Physical Sciences.
- It is the most coveted national recognition bestowed upon young scientists and engineers to honour their research and developmental work in India.

2<sup>nd</sup> OCTOBER 2021

### Digi Saksham programme

- The Ministry of Labour and Employment Labour and Microsoft India have jointly launched a digital skilled platform 'DigiSaksham' to enhance youth employability.

- This digital skills programme was launched with the objective of enhancing the employability of youth by improving their digital skills which has become an essential thing in an increasingly technology driven era.
- Programme will be implemented in the field by "Aga Khan Rural Support Programme India (AKRSP-I)".

### Key Highlights:

- Free of cost training in digital skills including basic skills as well as advanced computing, will be provided to more than 3 lakh youths in the first year.
- The Jobseekers can access the training through National Career Service (NCS) Portal ([www.ncs.gov.in](http://www.ncs.gov.in)).
- The initiative gives priority to the job-seekers of semi urban areas belonging to disadvantaged communities, including those who have lost their jobs due to Covid-19 pandemic.
- Programme will be implemented in the field by "Aga Khan Rural Support Programme India (AKRSP-I)".
- Under the DigiSaksham initiative, there will be basically three types of training viz. Digital Skills – Self paced learning, VILT mode training (Virtual Instructor led) and ILT mode training (Instructor led).
- The ILT training which is in person training would be conducted at the Model Career Centres (MCCs) and National Career Service Centres (NCSC) for SCs/STs across the country.

### UNCTAD Digital Economy Report 2021

- The United Nations Conference on Trade and Development (UNCTAD) published its "UNCTAD Digital Economy Report 2021".

### Key points:

- The Report mentions that the Philippines is one among six countries that allows free flow of data across borders. Free flow of data is required to boost the digital economy.

- Other five countries allowing free-flow of data across borders include- Canada, Australia, Mexico, Singapore and the United States. These countries use a “light-touch approach” for data flow.
- The “restrictive” or “guarded” approach for cross-border data flows is followed by countries like India, China, Indonesia, Nigeria, Pakistan, Kazakhstan, Rwanda, Russian Federation, Turkey, Saudi Arabia and Vietnam.

### ■ DO YOU KNOW: \_\_\_\_\_

Light-touch approach is mostly favoured by countries having strong regulatory environments and sufficient regulatory resources in order to monitor compliance of domestic laws.

## Swachh Bharat Mission Urban 2.0 and AMRUT 2.0

- The Prime Minister of India launched the Swachh Bharat Mission-Urban 2.0 (SBM-U 2.0) with the Atal Mission for Rejuvenation and Urban Transformation 2.0 (AMRUT 2.0).

### Key Points:

- Both the schemes, SBM-U 2.0 and AMRUT 2.0, are in line with the vision of PM Narendra Modi.
- Swachh Bharat Mission-Urban 2.0 (SBM-U 2.0) mission would be implemented over five years from 2021 to 2026. The focus of SBM-U 2.0 will be on sustaining the sanitation and solid waste management outcomes achieved and accelerate the momentum generated, thus taking Urban India to the next level of ‘Swachhata’. The aim of ‘Swachh Bharat Mission-Urban 2.0’ is to “make the cities completely free of garbage”.

### About AMRUT 2.0 mission

- AMRUT 2.0 mission will help in making cities self-reliant. It will ensure water security across the cities. This mission has been launched with the aim of providing 100 percent coverage of water supply to all households in 4,700 urban local bodies.

- This target will be achieved by providing 2.68 crore tap connections and 100% coverage of sewerage across 500 AMRUT cities. An outlay of Rs 2.87 lakh crore has been sanctioned for this mission.

3<sup>rd</sup> OCTOBER 2021

## NITI Aayog: Assessment report of District hospitals

- The NITI Aayog has released a report titled "Best Practices in the Performance of District Hospitals" that assesses district hospitals in India.

### Key Findings:

- NITI Aayog’s study called “Best Practices in the Performance of District Hospitals” report was prepared, after assessing 707 hospitals across 36 states and Union Territories in 2018-19.
- The report is the result of collaboration between the Ministry of Health and Family Welfare and WHO India.
- On ground data validation was carried out by the National Accreditation Board for Hospitals and Healthcare Providers, a constituent board of the Quality Council of India.
- The data from the Health Management Information System (HMIS) for 2017–18 served as the foundation for this analysis.
- District hospitals were divided into three categories for this performance evaluation: small (up to 200 beds), mid-sized (201-300 beds), and large (above 300 beds).

### Key Performance Indicators (KPIs):

- The assessment evaluated 707 district hospitals on 10 KPIs based on data from 2017-18.
- Number of functional hospital beds per 1,00,000 population
- Ratio of doctors, nursing staffs and paramedical staff in position to Indian Public Health Standards (IPHS) norm;
  - Proportion of support services available

- Proportion of core health care services available
- Proportion of diagnostic services available
- Bed occupancy rate
- C-section rate
- Surgical productivity index
- OPD per doctor
- Blood bank replacement rate

## Bal Raksha Kit

- The All India Institute of Ayurveda (AIIA), under the Ministry of Ayush, has developed an immunity boosting 'Bal Raksha Kit' to protect the children up to the age of 16 from the viral infection till the time a vaccine is available.

### Key Points:

- Kit comprises a syrup made of basil, giloy, cinnamon, liquorice and dry grapes, which have amazing medicinal qualities, apart from Annu oil, Sitopaladi and Chyawanprash whose regular consumption increases the immunity level among the children.
- The kit aims to help amplify the immunity of children to help them fight SARS-CoV-2 (COVID-19) infection and keep them healthy.
- This kit is significant because no Covid-19 vaccine is available for the children in India yet.

### NOTE:

This kit has been developed under the strict guidelines of the ministry of Ayush while it was manufactured by Indian Medicines Pharmaceutical Corporation Limited (IMPCL) in Uttarakhand.

## AUSINDEX Exercise

- India and Australia recently participated in the fourth iteration of the biennial maritime series 'AUSINDEX'.
- This exercise allows the Royal Australian Navy and Indian Navy to strengthen their "interoperability" by sharing the best practices.
- AUSINDEX Maritime exercises are conducted in India and Australia alternatively. The 4th edition is

being conducted in the Northern Australia Exercise Area.

### India-Australia Maritime Cooperation:

- India and Australia also conducted Ex AUSTRAL HIND (Bilateral Exercise with Army), EX PITCH BLACK (Australia's multilateral air combat training exercise).

4<sup>th</sup> OCTOBER 2021

## SACRED Portal

- The Vice President of India launched the 'SACRED Portal' to connect senior citizens with job providers in the private sector to cater to senior citizens seeking job opportunities..
- Senior Able Citizens for Re-Employment in Dignity (SACRED) is the name of the portal created by the Ministry of Social Justice and Empowerment.
- Portal has been developed in order to provide a platform for senior citizens in India seeking employment opportunities.

### Key Highlights:

- **Aim:** To devise ways to ensure Senior Citizens live healthy, happy, empowered, dignified and self-reliant life
- **Developed by:** The Ministry of Social Justice and Empowerment.
- **Eligibility:** Citizens above 60 years of age can register on the portal and find jobs and work opportunities
- **Funding:** An amount of Rs. 10 Cr would be provided for funding for the platform development along with maintenance grant of Rs. 2 Cr per year for 5 years.
- The portal is shaped on the recommendations of the Empowered Expert Committee (EEC) report on start-ups for the elderly.

### NOTE:

International Day of Older Persons was observed on October 1, 2021 under the Theme- "Digital Equity for All Ages". The United Nations General Assembly has also declared 2021-2030 the "Decade of Healthy Aging".



## Global Financial Stability Report 2021

- The International Monetary Fund (IMF)'s report on Global Financial Stability has warned that the digital currencies, besides providing new opportunities, poses significant financial security challenges.
- In its report, the IMF notes that the rapidly growing crypto ecosystem presents new opportunities to the world.

### Challenges:

- According to the IMF, rapid growth and increasing adoption of crypto assets pose financial stability challenges.
- Such decentralised currencies could also lead to instability as they are extremely volatile. They are much more volatile than the equities or commodities or exchange rates.
- Its transaction costs are fairly expensive as compared to digital money.

### About cryptocurrencies:

- Cryptocurrencies are digital or virtual currencies where encryption techniques are used for regulating the generation of units and verifying the transfer of funds. Such systems are operating independently of any central bank.

## Mitra Shakti 21 Exercise

- The 8th Edition of the "India Sri Lanka bilateral joint Exercise" called Mitra Shakti will be conducted from October 4 to October 15, 2021 at Combat Training School, Ampara in Sri Lanka.

### Key Points:

- 8th edition of India-Sri Lanka bilateral joint military exercise Mitra Shakti has commenced in Ampara in Sri Lanka. The two-week-long exercise is being conducted from 04 to 15 October 2021.
- Over the next few days, troops will train, share and rehearse tactical drills to undertake joint counter-terrorism operations in a semi-urban/rural environment under United Nations mandate.
- The exercise will act as the catalyst to bring synergy and cooperation at grass root level between the Indian army and Sri Lankan Army.

5<sup>th</sup> OCTOBER 2021

## Kamdhenu Deepavali 2021 campaign

- Recently, Kamdhenu Deepavali 2021 campaign was launched to manufacture and market more than 100 Crore Cow dung based Deepak lamps and Laxmi-Ganesh Idols.

### Key Points:

- Fisheries & Animal Husbandry Minister Shri Parushottam Rupala participated in the event joined by Cow Entrepreneurs and Cow lovers across India. Meeting, Webinars and Training programs for Kamdhenu Diwali also got started in every State.
- Rashtriya Kamdhenu Aayog has been providing training in association with the volunteer organizations across India, giving rise to a huge number of Cow dung based Start Ups.
- Kamdhenu Deepawali is to make Cows to be economically useful by proper economic use of Cow Dung and Cow Urine too along with its Milks, Curd, Ghee. More than 300 items are being made now by Panchgavya from Cow.
- This includes Deepawali items too like – Deepak, Lamps, Candles, Sambrani cup, Havansamagri, Dhoopbatti, incense sticks, Hard board, Wall piece, Laxmi-Ganesh idols etc made up of Cow dung.
- The Gomaya lamps were made by Cow Entrepreneurs and Cow owners. This lamo will save the environment by providing an eco-friendly alternative for chemical based Chinese lights.

### NOTE:

Rashtriya Kamdhenu Aayog is an agency working under the "Department of Animal Husbandry and Dairying" of "Ministry of Fisheries, Animal Husbandry & Dairying". It was established to protect cows.

## Molnupiravir: New drug to treat COVID-19

- Indian drugmakers Merck and Ridgeback Biotherapeutics announced the early results of Phase-3 trials of its antiviral drug called molnupiravir.

- As per the results, Molnupiravir has reduced the chances of hospitalisation by half among COVID-19 patients with mild or moderate symptoms.

### Key Highlights:

- The antiviral drug Molnupiravir, or MK-4482/EIDD-2801, is taken orally. Molnupiravir is being developed by the biotechnology firm Ridgeback Biotherapeutics in collaboration with pharmaceutical firm Merck.
- This is the first demonstration of an orally available drug to rapidly block SARS-CoV-2 transmission and it can be a game-changer.
- In case of molnupiravir drug, when tested on cultured cells, it works by altering critical enzymes which are necessary for virus to start replicating the host cells of body.
- Patients were monitored for 29 days. No deaths were reported among the patients who received molnupiravir. On the other hand, eight deaths were reported among those who received placebo.

6<sup>th</sup> OCTOBER 2021

## Nobel Prize 2021 for Physics

- U.S.-Japanese scientist Syukuro Manabe, Klaus Hasselmann of Germany and Giorgio Parisi of Italy won the Nobel Physics Prize for climate models and the understanding of physical systems.
- Manabe, 90, and Dr. Hasselmann, 89, share one half of the 10 million kronor (\$1.1 million) prize for their research on climate models, while Dr. Parisi, 73, won the other half for his work on the interplay of disorder and fluctuations in physical systems.
- This is the first time climate scientists have been awarded the Physics Nobel.

### Demonstration by Winners:

- Klaus Hasselmann and Syukuro Manabe Awarded for work in physical modelling of Earth's climate, quantifying variability and reliably predicting global warming.

- Demonstrated how increases in the amount of carbon dioxide in the atmosphere would increase global temperatures, laying the foundations for current climate models.
- Giorgio Parisi built a deep physical and mathematical model. This model made it possible to understand the complex systems in fields of mathematics, machine learning, biology and neuroscience.

### About Nobel Prize

- The award comes with a gold medal as well as 10 million Swedish kronor. Money for the prize comes from a bequest left by the creator of the prize & Swedish inventor, Alfred Nobel.

## 2021 Nobel Prize in Medicine

- Two scientists David Julius and Ardem Patapoutian won the Nobel Prize in medicine 2021 for their discoveries into how the human body perceives temperature and touch.

### Key Facts:

- They won the prize for their discoveries of receptors for temperature and touch. According to the award-giving body, these discoveries could make way for new pain-killers.
- These findings have allowed us to understand how heat, cold and mechanical force initiate the nerve impulses which in turn allow humans to perceive and adapt to the world around.

### About Winners

- David Julius discovered TRPV1, a heat-sensing receptor. His findings on the skin's sense of temperature was based on how certain cells react to capsaicin, the molecule that makes chili peppers spicy, by simulating a false sensation of heat.
- Ardem Patapoutian discovered two mechanosensitive ion channels known as the Piezo channels. The Piezo1 is named after the Greek word for pressure, 'piesi'. He is credited for finding the cellular mechanism and the underlying gene that translates a mechanical force on our skin into an electric nerve signal.

7<sup>th</sup> OCTOBER 2021

## NASA To Launch Double Asteroid Redirection Test (DART) Mission

- The American Space Agency, NASA has announced plans to launch “asteroid-killing Double Asteroid Redirection Test (DART) spacecraft” on November 24, 2021. The spacecraft will be launched, aboard SpaceX’s Falcon 9 rocket.

### Key Points:

- The Double Asteroid Redirection Test (DART) mission is directed by NASA to the Johns Hopkins Applied Physics Laboratory (APL) with support from several NASA centers: the Jet Propulsion Laboratory (JPL), Goddard Space Flight Center (GSFC), Johnson Space Center (JSC), Glenn Research Center (GRC), and Langley Research Center (LaRC).
- DART is a planetary defense-driven test of technologies for preventing an impact of Earth by a hazardous asteroid.
- DART will be the first demonstration of the kinetic impactor technique to change the motion of an asteroid in space.

### ■ NOTE:

The DART spacecraft comprises a compact Roll-Out Solar Arrays (ROSA) and a Didymos Reconnaissance & Asteroid Camera for Optical (DRACO) navigation.

## SVAMITVA Scheme

- The Prime Minister of India distributed e-property cards to over 1,71,000 beneficiaries of 3,000 villages in Madhya Pradesh under the “SVAMITVA” scheme, saying the scheme would vector growth of rural India.

### About SVAMITVA Scheme:

- SVAMITVA (Survey of Villages And Mapping with Improvised Technology in Village Areas) Scheme

was launched by the Prime Minister on National Panchayati Raj Day, 24th April 2020

- It is launched to enable economic progress of Rural India by providing “Record of Rights” to every rural household owner.
- It is implemented by the “Ministry of Panchayati Raj”. The scheme is implemented with the aim of providing property rights to residents across rural areas.
- The scheme will also make way to use property as a financial asset by villagers to take loans and other financial benefits in urban areas.
- It also aims to demarcate inhabited lands in rural areas using the latest surveying drone-technology. Thus, the scheme also boosts the ecosystem of drone manufacturing in India.

## Heli-borne Survey Technology

- Union Minister, Dr Jitendra Singh recently launched state-of-the-art Heli-borne survey technology.
- This project has been developed with the aim of mapping potential groundwater sources and its management in providing safe drinking water to people in the water scarce arid regions of India.

### About Heli Survey Technology:

- The Heli-borne geophysical mapping technique of CSIR-NGRI provides a high-resolution 3D image of the subsurface up to a depth of 500 metres below the ground.
- The main advantages of the Heliborne geophysical survey is that it is fast, highly data dense, precise and economical.
- Survey will help in utilizing groundwater for drinking purposes.

### ■ NOTE:

In the first phase, the Arid area of Rajasthan, Punjab, Gujarat and Haryana are being taken up for the heli-borne survey.