

Successful Launches of VL-SRSAM Missile System



- Defence Research & Development Organisation (DRDO) conducted two successful launches of Vertical Launch Short Range Surface to Air Missile (VL-SRSAM).
- The launches were carried out today from a static vertical launcher from Integrated Test Range (ITR), Chandipur off the coast of Odisha.
- Indigenously designed and developed by DRDO for Indian Navy, VL-SRSAM is meant for neutralizing various aerial threats at close ranges including sea-skimming targets.
- The current launches were carried out for demonstration of vertical launch capability as part of its maiden launch campaign. On both occasions, the missiles intercepted the simulated targets with pinpoint accuracy.
- The missiles were tested for minimum and maximum range. VL-SRSAM with Weapon Control System (WCS) were deployed during the trials.
- The launches were monitored by senior scientists from various DRDO labs involved in the design and development of the system such as DRDL, RCI, Hyderabad and R&D Engineers, Pune.

National Population Policy (NPP-2000)



- Address the unmet needs for basic reproductive and child health services, supplies and infrastructure.
- Make school education up to age 14 free and compulsory, and reduce drop outs at primary and secondary school levels to below 20 percent for both boys and girls.
- Reduce infant mortality rate to below 30 per 1000 live births.
- Reduce maternal mortality ratio to below 100 per 100,000 live births.
- Achieve universal immunization of children against all vaccine preventable diseases.
- Promote delayed marriage for girls, not earlier than age 18 and preferably after 20 years of age.
- Achieve 80 per cent institutional deliveries and 100 percent deliveries by trained persons.

- Achieve universal access to information/ counseling, and services for fertility regularisation and contraception with a wide basket of choices.
- Achieve 100 per cent registration of births, deaths, marriage and pregnancy.
- Contain the spread of Acquired Immunodeficiency Syndrome (AIDS), and promote greater integration between the management of reproductive tract infection (RTI) and sexually transmitted infection (STI) and the National AIDS Control Organisation.
- Prevent and control communicable diseases.
- Integrate Indian System of Medicine (ISM) in the provision of reproductive and child health services, and in reaching out to households.
- Promote vigorously the small family norms to achieve replacement levels of TFR.
- Bring about convergence in implementation of related social sector programs so that family welfare becomes a people centred program.

Sulfur Dioxide Emission Norms delayed



- The Supreme Court rejected the request of Association of Power Producers (APP) to extend the 2022 deadline for meeting pollution norms by two years.
- In 2015, the Ministry of Environment, Forest and Climate Change (MoEF&CC) notified emission norms for particulate matter (PM), sulphur dioxide and oxides of nitrogen.
- Particulate matter is a mixture of solid particles and liquid droplets in the air. Some particles can be seen with the naked eye; others can only be detected under a microscope.
- PM can cause serious respiratory disorders and even damage the lungs.
- It set a 2017 deadline for thermal power plants to comply with emissions standards for installing Flue Gas Desulphurization (FGD) units that cut emissions of toxic sulphur dioxide.
- FGD is a set of technologies used to remove sulfur dioxide from exhaust flue gases of fossil-fuel power plants, and from the emissions of other sulfur dioxide emitting processes such as waste incineration.
- The deadline was later changed to varying deadlines for different regions, ending in 2022.
- More than 50% of the plants have not taken adequate steps to meet these emission norms.
- In February 2020, the Ministry of Power asked the Central Electricity Authority (CEA) to submit a paper to suggest periodicity of pollutant monitoring as well as emission standards specific to plant locations.
- Accordingly, the CEA prepared a report, which was deemed incomplete and invalid by the Centre for Science and Environment (CSE).

Amendments to Juvenile Justice Act



- The Juvenile Justice (Care and Protection of Children) Act was introduced and passed in Parliament in 2015 to replace the Juvenile Delinquency Law and the Juvenile Justice (Care and Protection of Children Act) 2000.
- One of the main provisions of the new Act was allowing the trial of juveniles in conflict with law in the age group of 16-18 years as adults, in cases where the crimes were to be determined.
- The nature of the crime, and whether the juvenile should be tried as a minor or a child, was to be determined by a Juvenile Justice Board.
- This provision received an impetus after the 2012 Delhi gangrape in which one of the accused was just short of 18 years, and was therefore tried as a juvenile.
- The second major provision was with regards to adoption, bringing a more universally acceptable adoption law instead of the Hindu Adoptions and Maintenance Act (1956) and Guardians of the ward Act (1890) which was for Muslims, although the Act did not replace these laws.
- The Act streamlined adoption procedures for orphans, abandoned and surrendered children and the existing Central Adoption Resource Authority (CARA) has been given the status of a statutory body to enable it to perform its function more effectively.
- The amendment passed by the Union Cabinet this week has included for the first time the category of “serious crimes”.
- It has thus been tried to differentiate it from heinous crimes, while retaining heinous crimes. Both heinous and serious crimes have also been clarified for the first time, removing any ambiguity.
- The act has clarified that in case a juvenile is tried as an adult, he/ she may be sentenced for a maximum of 7 years or more but also a minimum of 7 years at the same time.

Significance of the amendments to the Act:

- It has been made sure that the children are protected and kept out of the adult justice system as much as possible.
- Currently, with no such mention of minimum sentence, the Juveniles between ages of 16-18 year could be treated as adults for a crime for possession of illegal substances or serious crimes too. Now this has been cleared.

Power of the District Magistrate:

- After the changes, the district magistrates along with the additional district magistrates would monitor the functioning of various agencies like Child Welfare Committees, the Juvenile Justice Boards, the District Child Protection Units and the Special Juvenile Protection Units would monitor the functioning of the Act in various districts.

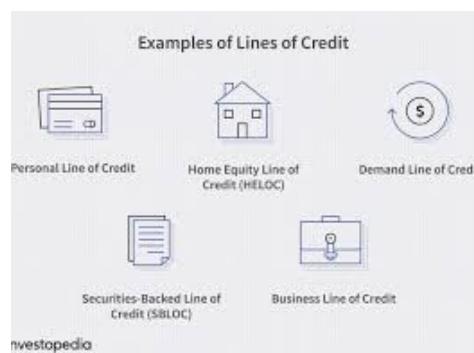
- “If children have been reunited with their parents or are found dead, that data too will be under the district magistrate, which will be given to the state government for proper evaluation,” Smriti Irani informed.
- DMs and ADMs have also been empowered to decide on adoption cases. Also appeals can be done at the divisional commissioner level now.
- The NCPDR report had found that not a single Child Care Institution (CCI) in India was in 100 percent compliance to the provisions of the Juvenile Justice Act. DM’s are also responsible now for ensuring that CCIs falling in their district are following all norms and procedures.

Red Eared turtle



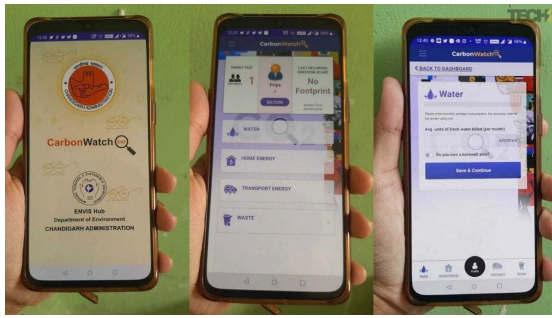
- Originated from the area around the Mississippi river and the Gulf of Mexico, they live in still and warm water bodies such as ponds, lakes, streams, and slow- running rivers.
- It is a semi aquatic turtle belonging to the family Emydidae.
- It is a subspecies of the pond slider.
- The Red-eared Slider is considered one of the world’s top 100 worst invasive species.
- The red-eared slider turtles are considered a major threat to native turtle specials, as they mature fast, grow larger, and produce more offspring, and are very aggressive.
- They can out-compete native turtles for food, nestling, and basking sites. As they eat plants and animals, they can finish off a wide range of aquatic species, including fish and rare frogs.
- The turtle found in the Kalathode canal has been referred to the Nodal Centre for Biological Invasions (NCBI) at KFRI.
- IUCN – Least Concern.

Line of Credit (LOC)



- A line of credit (LOC) is a preset borrowing limit that can be used at any time. The borrower can take money out as needed until the limit is reached, and as money is repaid, it can be borrowed again in the case of an open line of credit.
- A LOC is an arrangement between a financial institution—usually a bank—and a client that establishes the maximum loan amount the customer can borrow.
- The borrower can access funds from the line of credit at any time as long as they do not exceed the maximum amount (or credit limit) set in the agreement and meet any other requirements such as making timely minimum payments. It may be offered as a facility.

Carbon Watch



- The Department of Environment and Forest, Union Territory (UT), has developed a mobile app called Carbon Watch, which will allow users to assess their carbon footprint and will suggest ways to reduce it.
- The application can be downloaded through a QR code in Android supported smart cell phones.
- Carbon footprint is the amount of greenhouse gases-especially carbon dioxide-released into the atmosphere by a particular human activity.
- As a person downloads the application, they will need to fill details in four parts — Water, Energy, Waste Generation and Transport (Vehicular movement).
- In the category of Water, the person will be required to inform about the consumption of water.
- In the Energy category, the details regarding the electricity units consumed every month at the house, monthly bill etc and usage of solar energy will have to be furnished.
- In the Waste category, the individual will need to inform about the waste generation on their part and their family.
- In the transport section, the individual will have to inform about the mode of transport used by them- four wheeler, two-wheeler or bicycle.
- The mobile application will automatically calculate the carbon footprint of the individual.
- The application will also provide information such as the national and world average of the emission, and the individual's level of emission generation

First-ever audio recorded from the surface of Mars released by NASA



- NASA on Monday released the first-ever audio recorded from the surface of Mars, a crackling recording of a gust of wind captured by the Perseverance rover.
- In the audio release, one can also hear mechanical sounds of the rover.
- A microphone didn't work during the rover's descent, but it was able to capture audio once it landed, NASA said.

Rupee now among best performers in Asia, after being worst in 2020: Report



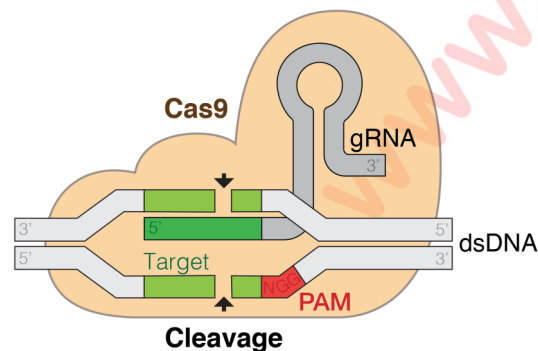
- The Indian rupee, which was the worst-performing currency in Asia in 2020, is now among its best performers, according to Bloomberg.
- Foreign investors have bought almost \$4 billion of Indian stocks this month, the most in Asia after China, the report said. On Monday, the rupee closed at a one-year high of 72.50 against the US dollar tracking domestic equities.

The world's largest cricket stadium in Ahmedabad



- Ahmedabad's Motera Stadium is the world's largest cricket stadium, which can accommodate 1.1 lakh spectators.
- It is spread across 63 acres. The stadium has advanced drainage facilities that can flush out rain water in 30 minutes.
- It has 76 corporate boxes and four team dressing rooms. Further, it also has an indoor cricket academy with a dormitory for 40 athletes.

CRISPR gene editing



- “CRISPR” stands for “clusters of regularly interspaced short palindromic repeats.”
- It is a specialized region of DNA with two distinct characteristics: the presence of nucleotide repeats and spacers.
- Repeated sequences of nucleotides — the building blocks of DNA — are distributed throughout a CRISPR region.
- Spacers are bits of DNA that are interspersed among these repeated sequences.
- In the case of bacteria, the spacers are taken from viruses that previously attacked the organism.
- They serve as a bank of memories, which enables bacteria to recognize the viruses and fight off future attacks.
- In India, several rules, guidelines, and policies are notified under the Environment Protection Act, 1986 to regulate genetically modified organisms.

- The above Act and the National Ethical Guidelines for Biomedical and Health Research involving human participants, 2017, by the Indian Council of Medical Research (ICMR), and the Biomedical and Health Research Regulation Bill implies regulation of the gene-editing process.
- This is especially so in the usage of its language “modification, deletion or removal of parts of heritable material”.
- However, there is no explicit mention of the term gene editing.
- The Nobel Prize in Chemistry for 2020 has been awarded for the discovery of CRISPR Cas9. The two scientists have pioneered the use of CRISPR – Cas9 (CRISPR-associated protein 9) system as a gene-editing tool.
- In 1987 a group of Japanese researchers observed an unusual homologous DNA sequence bearing direct repeats with spacing in a eubacterial gene.
- In subsequent years CRISPR was discovered and showed to be a bacterial adaptive immune system and to act on DNA targets.
- A notable discovery on the use of CRISPR as a gene-editing tool was by a Lithuanian biochemist, Virginijus Šikšnys, in 2012.
- Šikšnys showed that Cas9 could cut purified DNA in a test tube, the same discovery for which both Charpentier and Doudna were given the credit.
- Thus, the exclusion of Šikšnys from this year’s Nobel is going to raise discussions.

Popa langur



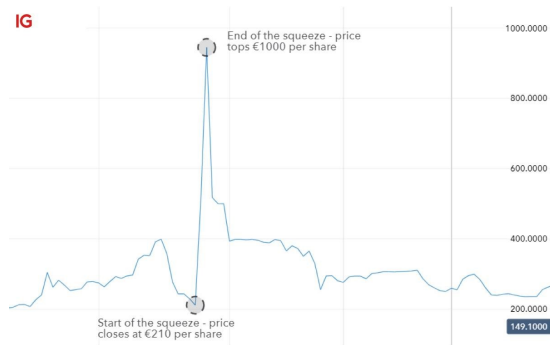
- In a rare find, scientists have identified a new species of primate, a lithe tree-dweller living in the forests of central Myanmar with a mask-like face framed by a shock of unruly grey hair.
- The Popa langur — named for an extinct volcano home to its largest population, some 100 individuals — has been around for at least a million years.
- But with only 200 to 250 left in the wild, experts will recommend that the leaf-eating species be classified as “critically endangered”.
- Throughout its range, the lithe monkey with chalk-white rings around its eyes is threatened by hunting and habitat loss.
- The first evidence of the new species was found not in the wild but the backrooms of the London Natural History Museum, where genetic analysis revealed that specimens gathered more than a century ago when Burma was a British colony were something new.

They have distinctive fur colouration and markings.

- *Trachypithecus popa*, or *T. popa* for short, has a grey-brownish and white belly, with black hands and wrists that look a bit like gloves.

- Its agile tail — at nearly a metre — is longer than its body, with the creature weighing about eight kilograms.
- There are more than 20 species of langur in the world, several of them critically endangered.

Short Squeeze



- A short squeeze occurs when a stock or other asset jumps sharply higher, forcing traders who had bet that its price would fall, to buy it in order to forestall even greater losses.
- Their scramble to buy only adds to the upward pressure on the stock's price.
- A short squeeze refers to a stock rise in price, adversely affecting investors who'd expected a decline.
- Signs of an imminent short squeeze include heavy buying or a high amount of a stock's shares being sold short.
- Buy-limit orders and hedging strategies offer short-sellers some protection against a short squeeze.
- A short-seller borrows shares (usually from their broker) they think are due for a fall or to keep on falling, and sells them on the open market at the current price.
- When the stock's price drops, as the short-seller was betting it would, they then buy the shares back for the new, lower amount.
- They return the borrowed shares to their stockbroker, keeping the difference in price as profit.
- In the interim, they're charged margin interest on the shorted shares until they pay them back

Jarosite



- Researchers have discovered a common martian mineral deep within an ice core from Antarctica.
- The find suggests the mineral—a brittle, yellow-brown substance known as jarosite—was forged the same way on both Earth and Mars: from dust trapped within ancient ice deposits.
- It also reveals how important these glaciers were on the Red Planet: Not only did they carve valleys, the researchers say, but they also helped create the very stuff Mars is made of.
- Jarosite was first spotted on Mars in 2004, when the NASA Opportunity rover rolled over fine-grained layers of it. The discovery made headlines because jarosite needs water to form, along with iron, sulfate, potassium, and acidic conditions.

- Jarosite is a basic hydrous sulfate of potassium and ferric iron (Fe-III) with a chemical formula of $\text{KFe}_3(\text{SO}_4)_2(\text{OH})_6$.
- This sulfate mineral is formed in ore deposits by the oxidation of iron sulfides.
- Jarosite is often produced as a byproduct during the purification and refining of zinc and is also commonly associated with acid mine drainage and acid sulfate soil environments.

International Year Of Creative Economy For Sustainable Development

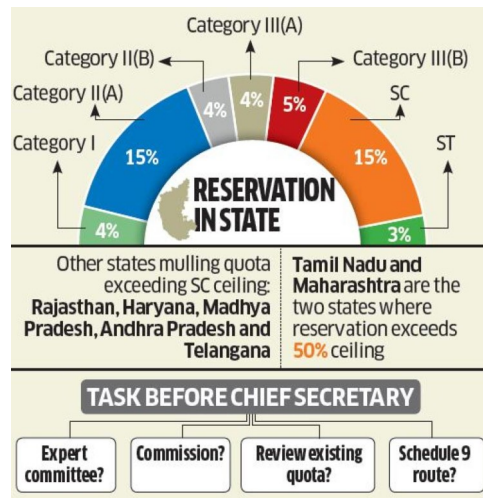


International Year
of Creative Economy for
Sustainable Development

2021

- The year 2021 was declared the International Year of Creative Economy for Sustainable Development at the 74th United Nations General Assembly.
- The implementation of the Year is led by the United Nations Conference on Trade and Development (UNCTAD), in consultation with UNESCO and other relevant UN entities.
- The International Year of Creative Economy for Sustainable Development could not have come at a more relevant time. The COVID-19 pandemic has paralyzed the creative economy.
- From creation, production, distribution to access, no actor within the creative value chain has been spared its impact.
- The health crisis also revealed and worsened the pre-existing vulnerabilities within the culture sector.
- Many artists and cultural professionals have been ineligible for social and economic assistances that saved workers in other sectors.
- While we consumed cultural content online more than ever before, artists and creators rarely received fair remuneration for our clicks and views.
- Under the theme The International Year of Creative Economy for Sustainable Development, a number of activities will take place to highlight the power of creativity for resilience in a time of pandemic and to share best practices and experiences, enhance human resource capacity, promote an enabling environment at all levels as well as tackle the challenges of creative economy.

Karnataka's current reservation policy?



- Reservations for Scheduled Castes, Scheduled Tribes, Backward Classes, and Muslims are capped at 50% in accordance with an order of the Supreme Court.

The quota break-up is as follows:

- Category I (Backward Classes) 4%;
 - Category II A (OBCs) 15%;
 - Category IIB (Muslims) 4%;
 - Category III A (Vokkaligas, etc.) 4%;
 - Category III B (Lingayats, Marathas, Bunts, Christians) 5%; SCs 15%; and STs 3%.
 - A total 95 communities and their subjects are recognised as Backward Classes, and 102 communities and their sub-sects as OBCs.
- The major communities in Karnataka in terms of population?
 - The Veerashaiva Lingayats are considered the single largest entity in Karnataka's 6-crore population, making up around 17%.
 - Vokkaligas are at 15%, Muslims 9%, and Kurubas around 8%. The Backward Classes block of various sub-castes minus the Kurubas make up around 25%.
 - SCs are around 15%, and STs 3%.

New paradigm in animal husbandry (Atul Chaturvedi & Naina Sharma)

- The Central government unveiled a string of measures to cushion the economy, as a part of which the Animal Husbandry Infrastructure Development Fund (AHIDF) was announced.
- As an allied industry of agriculture, the animal husbandry and dairy sector collectively employs more than 100 million people.
- Since the bulk of establishments in this sector is concentrated in rural India, the socio-economic relevance of this sector cannot be overstated.
- The AHIDF has been set up with an outlay of ₹15,000 crore. As per the provisions of AHIDF, a project will be eligible for a loan amount that covers up to 90% of the estimated cost – with an interest subvention of 3% for all eligible entities.
- As an example of a sub-sector concern where the dairy value chain could be strengthened, there is a pressing need to enhance chilling infrastructure at collection centres by setting up bulk milk coolers to prevent wastage of milk.
- Currently, there is an infrastructure gap of about 120-130 MMT, which translates into an investment potential of approximately ₹20,000 crore.

- There is also considerable potential to increase the productivity of cattle, especially by enhancing the quality of animal feed.
- With this in mind, the AHIDF has been designed to support the establishment of animal feed plants of varying capacities – including setting up of mineral mixture plants, silage making units, and animal feed testing laboratory.
- To spur on innovative solutions, the Ministry in collaboration with Invest India has invited ideas from domestic start-ups for the development of new varieties of green fodder and enriched animal feed.
- In a similar vein, there are not only economic but nutritional benefits to boosting the poultry segment's output, efficiency and quality.
- India is the fourth largest chicken meat producer and the second largest egg producer in the world and is well-positioned to help mitigate rampant malnutrition given that chicken meat provides the cheapest source of protein per unit.

Adding heft to diplomacy with some help from science

(Harsh V. Pant & Manoj Saxena)

- India's ongoing 'Vaccine Maitri' campaign, which is aimed at provisioning COVID-19 vaccines to countries both near to and away from its immediate neighborhood, is one of the most important recent initiatives to leverage its science and technological advantages for the furtherance of its foreign policy objectives.
- Despite limitations, India still managed to assist its partners from the Global South in key areas of science and technology
- The 21st century, it sought to reduce its dependence on foreign countries to then emerge as a net provider of development assistance in the international system.
- India's state instruments of diplomacy would also begin to show a more visible alignment to international science and technology cooperation.
- The country had "placed science and technology at the center of its development cooperation strategy
- The Ministry of External Affairs too has seen a restructuring with a Cyber Diplomacy Division, an E-Governance & Information Technology Division and a New Emerging & Strategic Technologies Division to manage science and technology issues in the nation's diplomatic matrix.
- The time is also right for India's young scientists and technologists to be made more aware of the country's foreign policy objectives, and to also enable all stakeholders in the policy establishment to learn more about science and technology to bridge the intellectual divide.

Dealing with the bigger neighbour, China

- Two nationalisms were contending and the untrammelled rise of China was generating new global power equations and alignments.
- The gulf between India and China was growing.
- Since 1993, India and China had arrived at a number of agreements to maintain peace and tranquillity and promote confidence building measures (CBMs) in the border areas.
- These were starting with 1993: the Agreement on the Maintenance of Peace and Tranquillity along the Line of Actual Control in the India-China Border Areas
- The Agreement Between the Government of the Republic of India and the Government of the People's Republic of China on Confidence-Building Measures in the Military Field Along the Line of Actual Control in the India-China Border Areas
- Protocol between the Government of the Republic of India and the Government of the People's Republic of China on Modalities for the Implementation of Confidence Building Measures in the Military Field Along the Line of Actual Control in the India-China Border Areas (2005)
- Agreement between The Government of the Republic of India and The Government of the People's Republic of China on the Establishment of a Working Mechanism for Consultation and Coordination on India-China Border Affairs (2012)
- Agreement between the Government of the Republic of India and the Government of the People's Republic of China on Border Defence Cooperation (2013)
- Some of the key features of these agreements were: the boundary question would be resolved peacefully
- That the two sides would respect and observe the Line of Actual Control (LAC) ; etc
- At the heart of the normalisation of Russia-China relations was the resolution of the border dispute between the two and the development of CBMs in the border regions.

Voice vote as constitutional subterfuge (By Anuj Bhuwania)

- The Karnataka Prevention of Slaughter and Preservation of Cattle Bill was passed by the State's Legislative Council on Monday, February 8.
- The prospect of the Bill passing the Upper House was doubtful as the Opposition parties — the Congress and the Janata Dal (S) — have a majority in the Council; and both were opposed to the Bill.
- Instead of having a division vote based on actual voting as is usual and as the Opposition members had demanded, the presiding officer just declared the Bill passed by voice vote without any division.
- Similar process was followed to pass the controversial farm laws (by the Rajya Sabha) in September 2020
- The fact that the legislative process followed for these laws did away with actual voting in the Upper House has not been given the prominence it deserves.

- The government has repeatedly invoked the multiple consultations around these laws over the years to justify them, but the fact that the pieces of legislation were passed without an actual legislative majority voting for them does not seem pivotal.
- Both were first passed as ordinances; such was the urgency felt for enacting them.
- And once they were tabled in the legislature, the governments insisted on the Bills not being referred to the legislative committees in either case, even though the Opposition repeatedly raised the demand.

The Money Bill ruse:

- The voice vote subterfuge supplements the other technique repeatedly deployed over the last few years to bypass the Upper House of Parliament — the Money Bill route, utilised increasingly in instances even where the laws concerned would not easily fit within that definition.
- The Aadhaar Bill was passed in this manner. But other controversial laws such as those pertaining to electoral bonds, retrospective validation of foreign political contributions and the overhaul of the legal regime relating to tribunals have also been carried out through the Money Bill ruse.
- The increasing use of the Money Bill route was defended by the then Leader of the Rajya Sabha when he deplored the repeated questioning by the indirectly elected Rajya Sabha of the wisdom of the directly elected Lok Sabha.
- The Lok Sabha is seen as directly representing the will of the people, and the Rajya Sabha as standing in its way.
- The Rajya Sabha is undoubtedly imperfect, partly because of constitutional design. And partly because obviously undesirable practices, such as members representing States they have no affiliation to, have been allowed to flourish.

The blank pages in India's online learning experience

(By Sunny Sebastian)

- COVID-19 has affected all sectors. However, there are areas where countries such as India should be more worried about.
- One of them is education, especially education of the girl child.
- Around 300 million children across all age groups are reported to be out of school in India now (the number is of the period when all schools were closed) .
- The education sector faces the challenges of delivery, especially of pedagogical processes, classroom assessment frameworks, students' support and teacher-student engagement.
- Studies conducted on government-run schools in various States indicate poor performance — a majority of children, especially girl students, have missed out much on the various e-mail platforms offered.
- Apart from poor access to digital data, the children were burdened with household/ farm work; girl students in particular were apprehensive of being given away in marriage.

- The basic strategy was to give a push to the digital distance learning method.
- The focus was on the use of text/video/audio content through SMS, WhatsApp, radio and TV programmes to reach out to students and engage them.
- The Union Ministry of Human Resource Development in March 2020 started sharing free e-learning platforms.
- They included the Diksha portal which has e-learning content aligned to the curriculum, and e-Pathshala, an app by the National Council of Educational Research and Training for Classes 1 to 12 in multiple languages.
- Studies indicate that the rapid transition to digital learning has been very challenging
- The initiative failed to take into account existing divides — spatial, digital, gender and class.
- A recent UNICEF report points out that the massive school closures exposed the uneven distribution of technology that is needed to facilitate remote learning.
- Following closure of schools, boys became inattentive to studies while girls, with lesser opportunities, were more involved in household chores.
- A survey promoted by the Centre for Budget and Policy Studies, in July 2020, of 3,176 households of Assam, Bihar, Uttar Pradesh, Telangana and Delhi, found that in families which faced cash and food shortages, only 50% of the boys and girls were confident of returning to school.
- The long closure of schools has also meant the disruption of a range of activities such as the mid-day meal scheme, the school health programme and pre-metric scholarships to girl children.

The case of Rajasthan:

- In States such as Rajasthan, the education of girl children is still a challenge.
- The State is positioned precariously — the second worst in overall literacy rates in India and the lowest literacy rate among the females (NSS,2017-18); 20% of girls in the age group 15-16 were out of school against the national average of 13.5 (Annual Status of Education Report 2018).
- Despite pioneering initiatives in education such as the Lok Jumbish and Shiksha Karmi projects, Rajasthan continues to flounder in systemic issues of education that relate to quality, equity and gender
- In Rajasthan, the access of girls to education during the COVID-19 period was limited to 11%. Girls who had online access reported links through WhatsApp (92%) and YouTube (12%).
- The reasons for the inability of students to access online education were: lack of devices, poor or no Internet connectivity, and also girls' preoccupation with household activity