

### NEWSPAPER HIGHLIGHT

Senior leader Jairam Ramesh has expressed concern over the Biological Diversity (Amendment) Bill, 2021, which is in the final stages of consultations in the Joint Parliamentary Committee. He questioned the exemption given to AYUSH practitioners from the provisions of the law. Mr. Ramesh, who is a member of the committee, said that this exemption could open the law for abuse. The law was introduced in Parliament on December 16 last year and was referred to the Joint Parliamentary Committee on December 20. The Bill amends the Biological Diversity Act, 2002 to simplify compliance requirements for domestic companies.

Pollution caused nearly nine million deaths in 2019, or about one in six deaths worldwide. This number has remained effectively unchanged since the previous such analysis in 2015 by the Lancet Commission on Pollution and Health, says a report published in The Lancet Planetary Health on Wednesday. Though the number of deaths from pollution sources associated with extreme poverty (such as indoor air pollution and water pollution) fell, these reductions are offset by increased deaths attributable to industrial pollution (such as ambient air pollution and chemical pollution). A report by The Lancet in 2019 said that noxious air killed 1.67 million Indians in 2019, or 18% of all fatalities.

78.9% percentage of households in West Bengal that have bicycles — the highest in the country, as per the National Family Health Survey (NFHS5). While the national average is 50.4%, U.P. holds the second rank with 75.6% of households owning a bicycle. Nagaland has the lowest number of households owning a bicycle at 5.5%. A government official said the top spot could be bagged because of the State government's 'Sabooj Sathi' scheme. 1,03,97,444 students have received bicycles under the scheme.

India's wholesale price inflation (WPI) was 15.08% in April. The WPI shot up to a record high of 15.08% in April after the heatwave led to a spike in prices of perishables such as fruits and vegetables. This is the 13th month of double digit inflation and arguments of a low base no longer hold. The last time WPI inflation was higher than this was in August 1991, when it was at 16.06%.

### FAIR AND AVERAGE QUALITY WHEAT

1.The Centre relaxed the Fair and Average Quality (FAQ) norms for "shrivelled and broken grains" of wheat in the ongoing rabi marketing season in Punjab, Haryana, and Chandigarh. The Centre has raised the FAQ permissible limit of "shrivelled and broken grains" of wheat to 18% from the existing 6%. This decision will reduce the hardship of farmers and avoid distress sale of wheat.

2.Every year, before procurement begins in this region in April, the specifications to ensure the quality of the procured wheat are notified. These specifications are notified by the Storage and Research (S&R) division of the Department of Food & Public Distribution in the Union Ministry of Consumer Affairs. This year, wheat containing up to 0.75% foreign matter, 2% damaged grain, 4% slightly damaged grain, 6% shrivelled and broken grain, and 12% moisture was cleared for procurement.

3.Implementation - The specifications are implemented at the time of procurement by the quality control wing of the Food Corporation of India (FCI), the central government's nodal agency for procurement. The FCI conducts physical and chemical analyses on the crops during the procurement process, and on the stored crop to ensure quality standards and parameters are met.

4.FAQ wheat - According to FCI, fair and average quality (FAQ) wheat is one that meets all all-down specifications. FAQ wheat is fully developed, and has a proper shine or lustre. The main varieties are golden or pale yellow in colour, the grain is not dark, and does not have any streaks.

5.It is properly dry, and meets all nutritional conditions, the values of which are tested in the lab in case of doubt. If a layman takes a handful of wheat and finds the grain is shiny and beautiful, it would usually mean that the wheat meets FAQ.

### LITHIUM-SULPHUR CELL TECHNOLOGY

1.Engineers in the USA have come up with a new Lithium-Sulphur (Li-S) cell technology. The Li-S cell technology could pave the way for the development of more efficient, sustainable and cost-effective batteries than the current lithium-ion (Li-ion) batteries in use today. The Li-S batteries use Sulphur instead of the cobalt found in the electrolyte (the liquid inside the battery) in the Li-ion batteries.

2.This is done by stabilizing gamma sulfur at room temperature to enable the carbonate electrolyte in the Li-ion batteries. The Sulphur is an extremely common element that is cheaply available. But the Cobalt is rare and expensive and associated with unethical mining in countries such as the Democratic Republic of the Congo. In a Li-S battery cell, metallic lithium is used as the negative electrode while the positive electrode is of sulfur.

3.One benefit of Li-S batteries is that they have a higher theoretical energy density and can hold twice the charge of a regular Li-ion battery. Problems - In Li-S batteries, when sulphur reacts with lithium, it creates many intermediaries called polysulphides. These polysulphides dissolve in the electrolyte as the cell functions. This results in the loss of the energy storing capacity with each charging cycle of Li-S batteries.

4.Another problem is that most Li-S technologies use ether electrolytes which have a boiling point of around 50 degrees celsius making them quite dangerous and inappropriate for most practical applications.

5.Vapour Deposition method -The US engineers tried to address these problems with a new technique called Vapour Deposition method. In this method, the sulphur is physically confining into micropores of carbon in order to enable a Li-S battery with a carbonate electrolyte. If the sulphur is physically confined, even if polysulphides are found, they would not directly interact with the carbonate solvent species and that would help prevent an adverse reaction (Hypothesis).

**Inflation in food articles was 8.35% while in vegetables it was 23.24%.**

**Members of the G7 countries are expected to appeal to India to reverse the ban on wheat exports during the upcoming G7 summit ( June 26-28) in Germany which is likely to be attended by Prime Minister Narendra Modi.**

**Russia said on Tuesday that 265 Ukrainian soldiers had surrendered at the besieged Azovstal steelworks in Mariupol, prompting Kyiv to call for a prisoner exchange.**

**India should desist from imposing an outright ban on crypto currencies and virtual digital assets, Confederation of Indian Industry (CII) president Sanjiv Bajaj said, noting there can be positive uses for such products. "At CII, we believe these are new, innovative assets or products that are coming out. We should not outright ban them," he said. His suggestion is to monitor and regulate them, perhaps in a sandbox environment, try them out in a more controlled environment and learn from them, and then decide what makes sense and what doesn't.**

**Russia became the fourth largest oil supplier to India in April, with volumes set to rise further in coming months as low prices spur demand from the world's No. 3 oil consumer and importer, tanker tracking data showed.**

**Prime Minister Narendra Modi inaugurated the country's first 5G testbed that will enable startups and industry players to test their products locally, thereby reducing dependence on facilities outside the country. The PM said, It is an important step towards self-reliance in the direction of critical and modern technologies in the telecom sector.**

**Taliban authorities said they have dissolved Afghanistan's independent human rights commission as it was "not considered necessary". Since the hardline Islamists seized power last August they have closed several bodies that protected the freedoms of Afghans, including the electoral commission and the Ministry for Women's Affairs.**

**Finland and Sweden will submit their bids to join NATO together on Wednesday, the two Nordic countries announced, despite Turkey's threat to block the military alliance's expansion.**

**Uttarakhand reported the highest number of bird species, at 293, while the highest number of checklists (lists of birds seen and heard by birdwatchers), at 192, was uploaded**

## **SUDDEN INFANT DEATH SYNDROME**

**1.** Researchers have identified a biochemical marker in the blood that could help identify newborn babies at risk for Sudden Infant Death Syndrome (SIDS). SIDS is the unexplained death, usually during sleep, of a seemingly healthy baby less than a year old. SIDS is known as crib death because the infants often die in their cribs. Butyrylcholinesterase (BChE) is an enzyme that plays a major role in the brain's arousal pathway.

**2.** In the new study, the researchers have found that the babies who died of SIDS had lower levels of the BChE enzyme shortly after birth. So, the low levels of BChE would reduce a sleeping infant's ability to wake up or respond to its environment, leading to death in SIDS. **3.** Other causes - Physical factors (Brain defects, low birth weight, respiratory infection); and environmental factors (sleeping on the stomach or side, sleeping on a soft surface, sharing a bed or overheating) Risk factors - Infants are most vulnerable between the 2nd and 4th months of life.

**4.** Boys are slightly more likely to die. Nonwhite infants are more likely to develop SIDS. Babies who live with smokers have a higher risk of SIDS (Secondhand smoke). Premature babies and babies having a low birth weight result SIDS. During pregnancy, the mother also affects her baby's risk of SIDS, especially if she is younger than 20, smokes cigarettes, uses drugs or alcohol, and/or has inadequate prenatal care.

**5.** Prevention - The actions are to be taken based on the above risks like placing your baby to sleep on his or her back, etc., Breast-feeding your baby for at least six months lowers the risk of SIDS.

## **ANANG TAL LAKE**

**1.** The Delhi Development Authority (DDA) is asked by a Union Minister to restore the historic Anang Tal Lake in Mehrauli, South Delhi.

**2.** The Anang Tal Lake is believed to have been built a thousand years ago. It is said to be created by Tomar King, Anangpal II, in 1,060 AD.

**3.** Anang Tal has a strong Rajasthan connection as Maharaja Anangpal is the maternal grandfather of Prithviraj Chauhan. The millennium old Anang Tal signifies the beginning of Delhi.

## **BUDDHA PURNIMA**

**1.** Buddha Purnima was celebrated on May 16th to mark the birth anniversary of Siddhartha Gautama or Gautam Buddha. It is also believed to be the day he attained salvation or Nirvana under the Mahabodhi tree at Bodh Gaya.

**2.** It is also known as Vesak. In 1999, it became an UN-designated day, to acknowledge the contribution of Buddhism to society. On this occasion, Modi became the first Indian Prime Minister to visit Lumbini. He laid the foundation of a monastery.

**3.** About Gautam Buddha: Buddha's birth and death dates are unknown. Most historians place his birth between 563 and 483 BC. He is believed to be the ninth incarnation of Lord Vishnu, as per Vedic literature. He was born as Siddhartha Gautama in Lumbini and belonged to the Sakya clan.

**4.** Places associated with him: Gautam attained Bodhi (enlightenment) under a pipal tree at Bodhgaya, Bihar. Buddha gave his first sermon in the village of Sarnath, near Varanasi in Uttar Pradesh. This event is known as Dharma Chakra Pravartana (turning of the wheel of law). He died at the age of 80 in 483 BCE at Kushinagar, Uttar Pradesh. The event is known as Mahaparinibban or Mahaparinirvana.

**5.** Schools of Buddhism: Mahayana (Idol Worship), Hinayana, Theravada, Vajrayana (Tantric Buddhism), Zen.

## **HOW DID THE SIKKIM COME TO JOIN THE INDIAN UNION**

**1.** The Statehood Day of Sikkim was observed on 16th May, 2022. It was on May 16, 1975 that Sikkim became the 22nd state of the Union of India. Beginning with Phuntsog Namgyal, the first chogyal (monarch), the Namgyal dynasty ruled Sikkim until 1975.

**2.** In 1950, three years after India's independence, a treaty was signed between Sikkim and the Republic of India. Under the agreement, the former continued its status as a 'protectorate' state within the Union of India.

**3.** In September 1974, the Chogyals called for a referendum. In

**from Jammu & Kashmir, according to the primary report from birdwatchers in the Himalayan regions of India, Nepal and Bhutan who came together for a unique intercountry exercise to document as many birds of the mountain range as possible. The exercise was undertaken on May 14 and a total of 607 species were documented in just one day.**

the subsequent referendum, as many as 97.5 percent participants voted in favour of joining India, while 2.45 percent voted against the proposal.

**4. On May 15, 1975, then-President of India, Fakhruddin Ali Ahmed, signed a constitutional amendment, and, a day later, Sikkim became the 22nd state of India; the position of the Chogyal was abolished as well.**

**5. Related facts:** During the Anglo-Nepalese war/the Gorkha war (1814 to 1816), Sikkim allied with the East India Company. The Company won and restored to Sikkim some of the territories that Nepal had forcibly taken from it in 1780. Sikkim became a British Protectorate under the Treaty of Tumlong signed in March, 1861.