

A wildlife team recently stumbled upon a spotbellied eagle owl (*Bubo Nipalensis*) for the first time in the Seshachalam forest, and for the third time in Andhra Pradesh. The bird's habitat, found on large trees in thick forests, is spread across the Indian subcontinent. But it was sighted only twice in the State earlier, and both the times it was at Nagarjunasagar Srisaillam Tiger Reserve (NSTR).

Expressing concern over a draft amendment made to the Information Technology Rules, 2021 by the Ministry of Electronics and IT (MeitY), which empowers the Press Information Bureau (PIB) to "factcheck" content and direct social media platforms to take down anything deemed "fake", the Editors Guild of India (EGI) on Wednesday sought its removal. It also urged the Ministry to initiate consultations with press bodies, media organisations and other stakeholders, on the regulatory framework for digital media, "so as to not undermine press freedom".

Ecologically sensitive zones (ESZ) are intended to safeguard 'protected areas' — national parks and wildlife sanctuaries — by transitioning from an area of lower protection to an area of higher protection. However, this 'fortress conservation model', has come under repeated criticism from conservation scientists, bringing in the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006 which is also known as the Forest Rights Act (FRA).

FRA recognises the customary and traditional rights (both individual and collective) of forest dwellers on forest land, including in protected areas. However, the ESZs span notified forests outside protected areas, most of which could also come under gram sabhas' jurisdiction under the FRA. The extent of ESZs from the boundary of a protected area ranges from 0 to as much as 45.82 km (in Pin Valley National Park, Himachal Pradesh).

The Forest Advisory Committee (FAC) of the Union Environment Ministry has asked the Arunachal Pradesh government to submit a revised request for permission to divert 1,165 hectares of forest land in the State's Dibang valley for the Etalin hydropower project. The FAC's rationale was that there was widespread local opposition to the project and this ought to be addressed more comprehensively by the State government.

The original proposal was sent way back in 2014 and it was "imperative" to review estimates on the number of trees that needed to be felled. There were also "concerns" regarding the biodiversity and protection of wildlife and this needed further assessment and safeguards to be incorporated.

The Centre on Wednesday surprised the Supreme Court by seeking a reference of the Lieutenant Governor versus Delhi Government dispute to a larger Bench of seven judges. "We may not be remembered in history for having handed over the

### SUPREME COURT (SC) CONSTITUTION BENCH QUESTIONS UTILITY OF ADVANCE MEDICAL DIRECTIVE (AMD) OR LIVING WILL

- Hearing the petition seeking modification of its guidelines for Living Will, laid down in Common Cause v Union of India (2018), SC stated: AMD can be applied only in narrow area where patients become so terminally ill that they are not able to say that treatment must stop.
- AMD or Living Will is a legal document that specifies type of medical care that an individual does or does not want in the event they are unable to communicate their wishes. Guidelines lack utility as in India a person is anyway free to refuse invasive treatment and accept death.
- Legislature is much more endowed with skills and sources of knowledge to enact a relevant law. In 2018, SC upheld legality of passive euthanasia and laid down procedure for living wills in India.
- Euthanasia is practice of ending life of a patient to limit the patient's suffering. It can be active (killing a patient by active means) or passive (intentionally letting a patient die by withholding artificial life support such as a ventilator or feeding tube). Accordingly, AMD can be effectuated under three cases.

### PURANA QILA: ARCHAEOLOGICAL SURVEY OF INDIA (ASI) REOPENS TRENCHES EXCAVATED EARLIER TO FIND FIRST OCCUPANTS

- ASI undertook excavations in 1969-73, 2013-14 and 2017-18. Identified as ancient settlement of Indraprastha (capital of Pandavas), a continuous habitation of 2,500 years was established in earlier excavations.
- Findings from earlier excavation include:** Painted grey ware from 900 BC, an earthen pottery sequence from Maurya to Shunga, Kushana, Gupta, Rajput, Delhi Sultanate, and Mughal periods. Artefacts such as sickles, parers, terracotta toys, kiln-burnt bricks, beads, terracotta figurines, and seals.
- Purana Qila was built by Mughal Emperor Humayun as a part of his new city of Dinpanah in the 16th century. Apart from archaeology, textual sources such as Ain-i-Akbari of Abul Fazal (16th century), mention that fort was built at site of Indraprastha. Architectural features of Purana Qila Complex.
- Quila-e-kunha mosque-Built by Sher Shah.** It reflects a transitional stage between architecture of Lodhis and Mughals.
- Sher Mandal-Built by Sher Shah, an octagonal structure built in red sandstone and decorated with white and black marble inlay. Humayun made it into a library and died after falling from the steps of this structure.
- Other Structures**-A Baoli for managing water supply and a hammam (bathhouse) is present. Lal Darwaza and Khairul Manazil are considered part of this complex. Three majestic Gateways: Bada Darwaja, Humayun Darwaza, and Talaqi Darwaza. Wide moat linked to river Yamuna.

### UPDATED DRAFT AMENDMENTS TO IT (INTERMEDIARY GUIDELINES AND DIGITAL MEDIA ETHICS CODE) RULES (IT RULES), 2021

- IT Rules, 2021 were framed by Ministry of Electronics and Information Technology (MeitY), exercising power under Information Technology Act, 2000, to: Protect constitutional rights of citizens under Article 14, 19 and 21 by pushing for open, safe and trusted, and accountable internet. Regulate online intermediaries (e.g., social media) who facilitate flow of data on internet.
- Updated Draft amendments have provision for content takedowns by empowering state agencies to instruct intermediaries to take down content deemed inaccurate or unfit. E.g., online platforms will remove fake content flagged by fact-checking unit at Press Information Bureau (PIB).
- Earlier, MeitY released draft amendments to include regulations for online gaming platforms with provisions like Including online gaming companies offering one or more online games as an intermediary. Also, online gaming intermediary will observe some additional due diligence. E.g., Registration of games with the self-regulatory body; risk of financial loss, Know-your-customer procedure etc.
- A Self-regulatory body to certify games and ensure that online games operating in India follow rules and regulation. A mandatory know-your-customer (KYC) verification for online games. Appointment of a compliance officer, nodal officer and grievance officer.

### ARTIFICIAL INTELLIGENCE (AI) CAN HELP FIGHT WILDFIRES: WORLD ECONOMIC FORUM

- A recent report by WEF highlighted that its Fire Aid initiative was helpful in managing wildfire in several regions of Turkey. In 2021,

national capital to a complete anarchy,” Solicitor General Tushar Mehta, for the Centre, told a five judge Bench led by Chief Justice of India D.Y. Chandrachud.

₹ 200 billion, the proceeds Adani Enterprises will use for capital expenditure requirements and to pay off some debt of its units from India’s biggest follow-on public offering (FPO) beginning on January 27. The fund raise comes as the conglomerate is aggressively expanding.

As Schools reopened after nearly two years of closure due to COVID-19, student enrolments increased to more than pre-pandemic levels, but the learning gap widened for foundational skills in reading and arithmetic, reversing several years of improvement, finds the Annual Status of Education Report (ASER) 2022, released by Pratham, a non-governmental organisation, on Wednesday. The national level study shows that despite school closures during the pandemic, the overall enrolment figures, which have been above 95% for the past 15 years for the sixto-14 age group, increased from 97.2% in 2018 to 98.4% in 2022.

Rivers and seas should become part of the country’s social psyche, and people living away from them should also be reminded of their significance, Sarbananda Sonowal, Union Minister of Shipping, Waterways and Ports, said on Wednesday. He was launching ‘Bharat Pravah India along its Shores’, an initiative to highlight the significance and imagery of rivers, ports and shipping through a series of nationwide events.

Medical professional and human rights advocate Aleida Guevara, daughter of Marxist revolutionary Che Guevara, on Wednesday said that the “criminal” blockade imposed by the U.S on Cuba had led to the island country developing alternatives in healthcare.

Microsoft Corp. said on Wednesday it would cut 10,000 jobs by the end of the third quarter of fiscal 2023, the latest sign that layoffs were accelerating in the U.S. technology sector as companies brace for an economic downturn. The layoffs and costs, related to hardware portfolio and other changes, will result in a charge of \$1.2 billion in the second quarter of fiscal 2023, representing a negative impact of 12 cents on per share profit, Microsoft said.

average annual global cost of wildfires was around \$50 billion and released an estimated 6,450 megatons of CO2 into atmosphere.

2. **Launched in January 2022**, Fire Aid project (using AI system) aims to allow better prediction of wildfires and more efficient use of resources during firefighting operations. Fire Aid predictions reduced both response time and risk to firefighters.
3. AI was used to develop a digital twin for fire management, which helped firefighters in testing hypotheses of intervention measures and observing their outcomes in simulations. A digital twin is a virtual representation of an object or system, is updated from real-time data, and uses simulation, machine learning and reasoning to help decision-making.
4. AI and machine learning role in combating wildfires Refinements in AI, real-time maps for wildfire prediction and risk mapping. Sensors with inbuilt AI can collect acoustic information or operate as smoke detectors for alerting authorities. Digital simulations can better plan efficient responses based on predicted outcomes. UAVs can provide live images and help firefighters plan their response.

**RADIO SIGNAL DETECTED IN DISTANT GALAXY USING GIANT METREWAVE RADIO TELESCOPE(GMRT)**

1. Astronomers from McGill University (Canada) and Indian Institute of Science (IISc), Bengaluru used data from GMRT to detect a radio signal originating from atomic hydrogen in an extremely distant galaxy at redshift  $z=1.29$ . Redshift represents signal’s wavelength change depending on the object’s location and movement.
2. A greater value of  $z$  indicates a farther object. Atomic hydrogen is the basic fuel required for star formation in a galaxy. When hot ionised gas from surrounding medium of a galaxy falls onto universe, gas cools and forms atomic hydrogen. This then becomes molecular hydrogen and eventually leads to formation of stars.
3. Detection was made possible by gravitational lensing phenomenon. In gravitational lensing, light emitted by source is bent due to presence of another massive body between target galaxy and observer, effectively resulting in magnification of signal.
4. **About GMRT-** It is an instrument for studying astrophysical phenomena, ranging from nearby Solar system to edge of observable Universe, at low radio frequencies. It is operated by National Centre of Radio Astrophysics (NCRA), which is part of Tata Institute of Fundamental Research.

**BACKING SRI LANKA, INDIA SENDS FINANCING ASSURANCES TO INTERNATIONAL MONETARY FUND (IMF)**

1. Facing its worst economic crisis since independence, financing assurances from creditors is critical for Sri Lanka to get the \$2.9 billion loan from IMF to put its economy on track. It is facing multiple challenges such as shortage of dollars, runaway inflation, and a steep recession. India, Japan, and China are Sri Lanka’s three largest bilateral lenders.
2. IMF was established (in 1944) to provide emergency financing to countries hit by crises and help them to stabilize their economies. Unlike development banks, IMF does not lend for specific projects. It also provides precautionary financing to help prevent crises.
3. Crises can occur due to domestic or/and external factors and can take many different forms such as Balance of Payment issue, illiquid or insolvent financial institutions, excessive deficits, and debt etc.
4. Lending instruments of IMF include-General Resources Account on non-concessional terms (market-based interest rates). Concessional financial support (currently at zero interest rates) through Poverty Reduction and Growth Trust, which is better tailored to needs of low-income countries. Resilience and Sustainability Trust to help low-income and vulnerable middle-income countries.



“When you are walking towards your goal; stop counting the steps.”

**DR. KHAN**  
(KSG)