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UNEP World Conservation Monitoring Centre (UNEP-WCMC) report on "State of the World's Migratory Species" launched

- This First ever report was launched by Convention on the Conservation of Migratory Species of Wild Animals (CMS) at 14th Conference of Parties in Uzbekistan.
- Key findings of report
 - 1 in 5 CMS-listed species are threatened with extinction (TwE) and 44% have decreasing population trend.
 - 82% of Appendix I species are TwE and 76% are declining.
 - 18% of Appendix II species are globally threatened and 42% have decreasing trend.
 - 97% of CMS-listed fish are TwE.
 - Extinction risk is arowing for both CMS listed species and all migratory species.
 - € Globally, 399 migratory species (threatened or near TwE) are not currently listed under CMS.
 - degradation and fragmentation; Overexploitation.
 - Pollution, Invasive species and diseases etc.
- Importance of Migratory Species: Climate change mitigation; Regulate Ecosystem through predation and grazing; important source of food and ecotourism attractions etc.

Recommendations

- Identify, protect, connect and restore sites for migratory species.
- **Strengthen** collaborative international efforts to tackle overexploitation.
- Scale up efforts to tackle climate change, and light, noise, chemical and plastic pollution.
- Prioritize research on 'Data Deficient' migratory species.

About CMS

- Signed in 1979, CMS (Bonn Convention) is an environmental > treaty under aegis of United Nations Environment Programme (UNEP).
- It provides a global platform for conservation and sustainable use of migratory animals and their habitats.
- **CMS Appendices**
 - Appendix I: Migratory species that have been assessed as being in danger of extinction.
 - Appendix II: Migratory species which require international agreements for their conservation.
- CMS has 133 parties including India.
- First Global Environment Facility (GEF) Council meeting of Global Biodiversity Framework Fund (GBFF) held in United States
- GBFF aims to scale up financing for implementation of Kunming-Montreal Global Biodiversity Framework (KMGBF).
 - Ratified by 186 countries and launched in 2023 at Seventh GEF Assembly in Vancouver, Canada.
 - Decisions of GBFF Council are to be taken by consensus.
 - World Bank invited to serve as Trustee of GBFF.

Key highlights of meeting

- GEF's member government have agreed to invest \$1.1 billion for international action on biodiversity, climate change, nature renewal, and pollution control.
- adaptation projects funded by Least Developed Countries Fund and Special Climate Change Fund.
- Spain announced 10 million euros to GBFF, adding to contributions announced by Canada, United Kingdom, Germany, and Japan.
- **Policy** were approved to allocate donor funds based on availability.

About KMGBF

- Adopted at COP15 (held in Montreal) to UN Convention on Biological Diversity.
- KMGBF has set 23 targets to be achieved by 2030 which include 30% conservation of land and sea, 50% reduction of invasive species, raising at least \$200 billion per year etc.

About GEF

- > Established in 1992 Rio Earth Summit, it is a partnership of 18 agencies to address world's most challenging environmental issues.
- > GEF's main governing body i.e. Council comprises 32 members appointed by constituencies of GEF member countries (14 and 16 from developed and developing countries respectively, and 2 economies in transition).
- GEF serves as a "financial mechanism" to five conventions: >
 - Convention on Biological Diversity.
 - UN Framework Convention on Climate Change.
 - Stockholm Convention on Persistent Organic Pollutants.
 - ⊖ UN Convention to Combat Desertification.
 - O Minamata Convention on Mercury.



Department-related Parliamentary Standing Committee on Health and Family Welfare released report on Quality of Medical Education

 Primary objective of report was to find areas of improvement to ensure that medical graduates are well-equipped to navigate the evolving landscape of healthcare delivery.

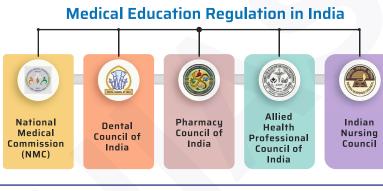
Status of Medical Education in India

- $\odot~$ One of the largest medical education systems with 702 medical colleges.
- India achieved a doctor to population ratio of 1:856 (WHO recommends 1:1000).
- Actual health research expenditure as a percentage of GDP has constantly remained at 0.02 since 2021-22.

Issues in Medical Education System

- Peculiar paradox as system produces significant number of physicians while many Indian students pursue their medical education abroad.
- Shortage of seats at both undergraduate and postgraduate level.
- Uneven distribution of medical colleges with high concentration in urban areas.
- Non-availability of sufficient funds for medical research.
- Non-optimal use of existing infrastructure.

Recommendations



- Streamlining the recruitment process to prevent ghost faculty in medical colleges.
- Leverage technology for distance learning and virtual classrooms for addressing seat shortage.
- NMC maintain a real-time national database of doctors and undertake a comparative study of best practices of its parallel organisation in various countries.
- Chalk out comprehensive India-specific plan for next 20-25 years and encourage private investment.

22nd Law Commission of India (LCI) submits its 286th Report titled "A Comprehensive Review of the Epidemic Diseases Act (EDA), 1897"

As per 22nd LCI, existing legislation i.e. EDA 1897 does not comprehensively address the concerns pertaining to containment and management of future epidemics in country.

About EDA, 1897

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- It provides for prevention of spread of epidemic diseases. It granted extensive powers to State Governments to regulate, prevent and control epidemic disease.
 - Epidemic Diseases Bill was introduced in Council of Governor-General of India in Calcutta by John Woodburn.
 - Colonial government {Lord Elgin-II (1894 1899)} introduced EDA to tackle the epidemic of bubonic plague that had spread in erstwhile Bombay Presidency in 1896.
- In light of violence faced by healthcare workers during COVID-19, Epidemic Diseases (Amendment) Act, 2020 Was enacted which amended EDA, 1897.

Limitations of EDA, 1897

- Colonial era law is incapable of handling the changing variants of communicable diseases.
- ⊕ Does not define an 'epidemic' or an 'infectious' disease, and does not differentiate between an 'outbreak', 'epidemic' and 'pandemic'.
- Lack of decentralization and demarcation of power between Centre, State and local authorities.
- ⊕ Lacks stipulated guidelines that would be followed during isolation and quarantine.
- Makes no mention for safe disposal of infectious medical waste and human corpses.

Recommendations

- > **Define terminologies** like Outbreak, epidemic etc. in comprehensive manner.
- Dedicated Standard Operating Procedure to respond against epidemic.
- States should collaborate with Centre in preparing Epidemic Plan and revise it at regular intervals.
- Broad framework for imposing lockdown and restrictions on movement of people and vehicles.

2/4



PRS Legislative Research released Vital Stats on Functioning of the 17th Lok Sabha

- The 17th Lok Sabha (LS) held its sessions between June > 2019 and February 2024. During this period,
 - It held 274 sittings and passed 179 Bills.
 - Question Hour functioned for 60% of scheduled time in LS and 52% in Rajva Sabha.
 - Question hour was cancelled in monsoon session of 2020, due to pandemic.
- Issues arising out of LS functioning:
 - Fewest sittings amongst all full-term Lok Sabhas with 206 instances of suspension of Members of Parliament.
 - Average annual sitting days down to 55 from 135 in ٠ the first LS.
 - € For the first time, LS did not elect Deputy Speaker for entire duration.
 - Article 93 of Constitution requires that LS elect a Speaker and a Deputy Speaker 'as soon as may be'.
 - Only 16% bills referred to committees for detailed
 scrutiny with passage of majority of bills without recorded voting.
 - 35% of bills passed with less than an hour of discussion.
 - Time spent on budget discussions has reduced with
 about 80% of the budget voted without discussion.
- Way forward for improving LS functioning
 - More frequent sittings of Parliament.
 - Detailed scrutiny of bills with adequate discussion and referral to committees.
 - and constructive consultations between parties.

Observations of Black Hole M87* data **Event** captured by Horizon telescope (EHT) in 2018 show persistent shadow of the black hole

- 3 The 2018 observations revealed a familiar shadow of the same size EHT found in 2017, when it took the first image of a black hole.
- A black hole is an astronomical object with a gravitational pull so strong that nothing, not even light, can escape it.
 - ● Black hole's gravitation pull becomes this strong at
 the Event Horizon, the boundary from within which a particle cannot escape.
 - Event horizon captures any light passing through it, and the distorted space-time around it causes light to be redirected through gravitational lensing.
 - These two effects produce a dark zone that ٠ astronomers refer to as the event horizon shadow.
- Gravitational Lensing occurs when a massive celestial body such as a galaxy cluster causes a sufficient curvature of spacetime for the path of light around it to be visibly bent, as if by a lens.
 - The body causing the light to curve is accordingly called a gravitational lens.
 - general relativity.
- According to Einstein's theory of general relativity, time and space are fused together in a quantity known as spacetime. • Massive objects cause spacetime to curve and gravity
 - is simply the curvature of spacetime.
 - Θ As light travels through spacetime, the path taken by light will also be curved by an object's mass.

Event Horizon Telescope (EHT)

- It is a network of synchronized radio observatories around > the world that combine as a single telescope with an aperture the size of Earth used to observe sources of radio light associated with black holes.
- It links radio telescopes across the globe to create an Earthsized interferometer using Very Long Baseline Interferometry (VLBI).
- Presently, no Indian radio telescope is part of EHT.

Also in News



Alaskapox

- Alaska health officials have confirmed first death from a recently discovered viral disease - Alaskapox.
- About Alaskapox
 - Part of a family of viruses known as orthopoxviruses, several of which are known to infect and cause disease in human.
 - € Double-stranded-DNA virus comes from same genus as smallpox, and cowpox.
 - First identified in an adult in Fairbanks, Alaska in 2015, and primarily occurs in small mammals.
 - To date, no human-to-human transmission of Alaskapox € virus has been documented.
 - Symptoms: One or more skin lesions (bumps or pustules), € swollen lymph nodes and joint and/or muscle pain.

Atlantic Meridional Overturning Circulation (AMOC)

- Researchers developed an early warning indicator for the breakdown of the AMOC.
 - AMOC has been labeled as one of the tipping elements in the climate system.
- About AMOC
 - AMOC is a large system of ocean currents that carry warm water from the tropics northwards into the North Atlantic.
 - It is driven by differences in temperature and salt content. €
 - It is being eroded by faster than expected melt-off of € Greenland's glaciers and Arctic ice sheets.
- Implications of AMOC collapse: Rise in Atlantic Sea levels; Flipping of wet and dry seasons in the Amazon; More erratic fluctuations in temperatures; More warmer southern hemisphere.

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Securities Appellate Tribunal (SAT)

- Absence of a full bench is affecting functioning of the SAT leading to delays and disruptions.
- **About Securities Appellate Tribunal**
 - It is a statutory body established under the provisions of Securities and Exchange Board of India (SEBI) Act, 1992. €
 - It hears and disposes appeals against orders passed by
 - SEBI
 - Pension Fund Regulatory and Development Authority (PFRDA)
 - Insurance Regulatory Development Authority of India ٠ (IRDAI)
 - The Presiding Officer and Judicial Members are appointed by the Central Government in consultation with the Chief Justice of India or his/her nominee while Technical members are appointed on recommendation of a Search-cum-Selection Committee.

Resolution Professionals

- A circular by Insolvency and Bankruptcy Board of India (IBBI) directed Resolution Professionals (RPs) to share reports on insolvency applications with both debtors and creditors.
 - Under Insolvency and Bankruptcy Code (IBC), 2016, RPs are required to submit a report to the adjudicating authority recommending approval or rejection of an application for initiating the insolvency resolution process.
- As per the IBC, RP means an Insolvency Professional (IP) appointed to conduct the corporate insolvency resolution process.
 - Entire insolvency and bankruptcy process is managed by an € **IP**, appointed by the adjudicator.



Unani System of Medicine

- World Unani Day is celebrated every year on 11th February, marking birth anniversary of famous Indian Unani scholar Hakim Ajmal Khan.
- Unani system of medicine is one of the oldest healthcare systems of the world, originating in Greece (Yünän).
 - Hippocrates is known as the father of Unani system.
 - € Unani medicine is based on the 'Humoral Theory', which presupposes the presence of four Humors - Dam (blood), Balghum (phlegm), Safra (yellow bile) and Sauda (black bile) in the body.
- It came to India around the 8th century by the Arabs and is officially recognized as one of the AYUSH systems.

Dhokra Shilpkala

- Chhattisgarh's Ocher Studio is helping in preservation of Dhokra Shilpkala.
- About Dhokra Shilpkala
 - 4000 years old intricate process of metal casting, using lost-wax technique also known as cire perdue.
 - Origins of art can be traced to tribal communities residing in regions of Chhattisgarh, Jharkhand, West Bengal, and Odisha.
 - O Word "Dhokra" is believed to be derived from Dhokra Damar tribes, who are traditional metal smiths of Central India.
 - Art is inspired from nature, mythology, and everyday life.
 - Threat: Rapid urbanization, diminishing number of skilled artisans and rise of modern materials and technologies.
- Also, Bastar Dhokra handicraft from Chhattisgarh has already been granted GI Tag.

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∕∕ך **Unified Payment Interface (UPI)**

- 3 Prime Minister of India jointly inaugurated UPI services with Mauritius and Sri Lanka and also RuPay card services in Mauritius.
 - This will boost digital transformation, promote tourism and € strengthen bilateral economies ties with both countries.

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- About UPI
 - It powers multiple bank accounts into a single mobile € application (of any participating bank), merging several banking features e.g., transfer of funds, etc.
 - an initiative of RBI and Indian Banks' Association under provisions of Payment and Settlement Systems Act, 2007.

Telecom Technology Development Fund (TTDF) scheme

- C-DOT and IIT-Kharagpur signed an agreement to develop prototypes for 10-Gigabit-capable symmetric Passive Optical Network (PON), Optical Line Terminal (OLT) and Optical Network Unit (ONU).
 - This agreement was signed under TTDF scheme.
- About TTDF Scheme
 - Launched by Universal Service Obligation Fund, a body under Department of Telecommunications in 2022.
 - Aims to provide funding support to domestic companies involved in technology design, development, commercialization of telecommunication products and solutions to enable affordable broadband and mobile services in rural and remote areas.

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Kawal Tiger Reserve

- Six Forest staff members were suspended for being negligent in controlling teak smuggling in Kawal Tiger Reserve.
- About Kawal Tiger Reserve
 - Example 2 Located in Telangana and in the southern-most tip of the Central Indian Tiger Landscape, having linkages with Tadoba-Andhari (Maharashtra) and Indravati (Chhattisgarh) tiger reserves.
 - Part of Deccan peninsula-central highlands and is nestled in the Sahyadri Mountain Ranges.
 - € It is a major catchment of Godavari River and rivulets like Peddavagu and Kadam.
 - Vegetation: Southern Tropical dry-deciduous, predominantly € teak and bamboo.
 - € Fauna: Nilgai, Chinkara, Black buck, Sambar, Spotted deer, Tiger, Leopard etc.

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