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Lemru Elephant Reserve

- The Chhattisgarh Government has proposed to decrease the area of the proposed Lemru Elephant Reserve, in Korba district, to 450 sq km.
- The proposal for the Lemru Reserve was passed by the Assembly in 2005 and got central approval in 2007.
- This reserve is a **natural elephant habitat**. The reserve will be a part of an elephant corridor that connects Lemru (Korba), Badalkhol (Jashpur), Tamorpingla (Surguja).
- Lemru is one of two elephant reserves planned to prevent human-animal conflict in the region, with elephants moving into Chhattisgarh from Odisha and Jharkhand.
- [**Badalkhol Tamorpingla** is another elephant reserve that was notified in 2011.]
- The area proposed under the reserve is part of the Hasdeo Aranya forests, a very diverse biozone that is also rich in coal deposits.
- The reserve is in a coal-bearing area with an estimated value of Rs 100,000 crore.

'Right to Repair' Movement

- In recent years, countries around the world have been attempting to pass effective 'right to repair' laws. But the movement is facing tremendous resistance from tech giants such as Apple and Microsoft over the years.
- The movement traces its roots back to the very dawn of the computer era in the 1950s.
- The goal of the movement is to get companies to make spare parts, tools and information on how to repair devices available to customers and repair shops,
 1. To increase the lifespan of products and
 2. To keep them from ending up in landfills i.e., electrical waste (e-waste) generation.
- It will contribute to circular economy objectives by improving the life span, maintenance, re-use, upgrade, recyclability and waste handling of appliances.

- **US** - The US President called on the Federal Trade Commission to force tech companies to allow consumers to fix their own electronic devices - either themselves or using a technician of their choice.
- As of 2021, almost all of the 50 US states have proposed a right to repair bill.
- **UK** - The UK government introduced right-to-repair rules with the aim of extending the lifespan of products by up to 10 years.

Soberana

- Cuba's State-run corporation BioFarma's Soberana 2 and Abdala vaccines have shown greater-than-90% efficacy.
- Both the vaccines are three-shot vaccines. Both are subunit vaccines, meaning that a part of the virus forms the antigen and is hitched on to another construct.
 - In Abdala, the spike protein of the coronavirus is combined with a chemically manufactured adjuvant,
 - In Soberana 2, the spike protein is chemically linked to the tetanus toxoid, making it a conjugate vaccine.
- The Soberana vaccine is by far the only one among coronavirus vaccine candidates that relies on the conjugate vaccine technology.

Conjugate Vaccines

- A conjugate vaccine is a type of vaccine which combines a weak antigen with a strong antigen as a carrier so that the immune system has a stronger response to the weak antigen.
- The most common conjugate vaccines are those used for Haemophilus influenza type b and the pneumococcal bacteria.
- Cuban vaccine candidates are based only on the part of the virus that is involved in contact with the cell's receptor, the Receptor-Binding Domain (RBD).
- The RBD is the one that induces the greatest number of neutralising antibodies.
- **Cheimi-Hib** - It is another vaccine already developed by Cuba with this principle. It is the world's second Conjugate Vaccine, against haemophilus influenzae type b.
- [Haemophilus influenzae type b is a coccobacilli responsible for diseases such as meningitis, pneumonia and epiglottitis.]

Jog Falls

- Jog Falls, being the second- highest plunge waterfalls in India is situated in the dense evergreen forests in Shimoga district, Karnataka.

- It is the third-highest waterfall in India after the Nohkalikai Falls in Meghalaya and Dudhsagar Waterfalls in Goa.
- Jog Falls is also known by alternative names like Gerusoppe Falls, Gersoppa Falls, and Jogada Gundi.
- The Sharavathi river falls at a place called Gerusoppa-Jog, and gets segmented into four cascades, known as Raja, Rani, Rover and Rocket.

Electing Speaker and Deputy Speaker

- The Maharashtra Legislative Assembly has been without a Speaker for most of this year.
- The Maharashtra Governor has forwarded the demand of the Leader of Opposition to fill the post of the Speaker to Chief Minister (CM).
- The CM has responded that the Constitution and the Assembly rules do not specify a time-frame for filling a vacancy in the post of Speaker.
- **Election** - Article 93 of the Constitution for Lok Sabha and Article 178 for state Assemblies state that these Houses “shall, as soon as may be” choose two of its members to be Speaker and Deputy Speaker.
- The Constitution neither sets a time limit nor specifies the process for these elections.
- It leaves it to the legislatures to decide how to hold these elections.
- In Lok Sabha and state legislatures, the President/Governor sets a date for the election of the Speaker, and it is the Speaker who decides the date for the election of the Deputy Speaker.
- The legislators of the respective Houses vote to elect one among themselves to these offices.
- The Constitution provides that the office of the Speaker should never be empty. So, he continues in office until the beginning of the next House, except in the event of death or resignation.

Suborbital Flights

- While the spacecrafts cross the ill-defined boundary of space, they won't be going fast enough to stay in space once they get there. This is called “Suborbital”.
- If a spacecraft or anything else reaches a speed of 28,000 km/h or more, instead of falling back to the ground, it will continuously fall around the Earth.
- That continuous falling is what it means to be in orbit and is how satellites and the Moon stay above Earth.
- Anything that launches to space but does not have sufficient horizontal velocity to stay in comes back to Earth flies a suborbital trajectory.
- So it won't complete one orbital revolution (it does not become an artificial

satellite) or reach escape velocity.

- Those aboard the suborbital flights will for a few minutes be in space, experience a few minutes of exhilarating weightlessness and absolutely earn their astronaut wings.

Source: PIB, The Hindu, The Indian Express

