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Homes for Transgender Children

- India's first children's homes for transgender children in need of care and protection will soon be established in Bengaluru Urban.
- Ministry of Women and Child Development gave its nod for establishing two government-run homes reserved for transgender children.
- The two homes would have the capacity to house 50 children each.
- Child Welfare Committee (CWC) are not able to place the transgender children in the existing children's homes for boys and girls.
- So, a move to establish a separate home for transgenders would help them cross the many hurdles they faced in society.

ARTPARK

- AI & Robotics Technologies Park (ARTPARK) is a not-for-profit foundation set up in Bengaluru.
- It is established by Indian Institute of Science (IISc), Bengaluru with support from AI Foundry in a public-private model.
- It will be funded by Department of Science & Technology, Govt. of India, under National Mission on Inter-disciplinary Cyber-Physical Systems.
- It will leverage AI (Artificial Intelligence) & Robotics in a mission-driven model that will have a societal impact.
- It will bring about collaborative consortium of partners from industry, academia and government bodies.
- It will develop facilities to support technology innovations and capacity building through advanced skills training of students and professionals in the areas of AI & Robotics.
- ARTPARK, in collaboration with AI foundry, will run a novel ARTPARK Venture Studio will mentor technopreneurs.
- It will develop **DataSetu** - that will enable privacy-preserving framework to share data and run analytics spurring the data-sharing ecosystem and create a data marketplace, boosting AI solutions.
- One such service will be **BhashaSetu** - that will enable real-time Indic language translation, both of speech to speech and speech to text.

Cannabis

- The UN Commission on Narcotic Drugs (CND) has decided to remove cannabis and cannabis resin from Schedule IV of 1961 Single Convention on Narcotic Drugs, which lists the most dangerous substances.
- This removal will change the way cannabis is regulated internationally.
- Both cannabis and cannabis resin will continue to remain on Schedule I, which includes the least dangerous category of substances.
- India has voted with the majority at the United Nations for its removal.
- For 59 years, cannabis had been subject to the strictest control schedules, which even discouraged its use for medical purposes.
- Under India's Narcotic Drugs and Psychotropic Substances (NDPS) Act, 1985, the production, manufacture, possession, sale, purchase, transport, and use of cannabis is a punishable offence.

Malayan Giant Squirrel

- This tree squirrel species (Ratufa bicolor) is native to the forests of India's Northeast.
- It is currently found in parts of West Bengal, Sikkim, Assam, Arunachal Pradesh, Meghalaya, and Nagaland.
- It is considered to be a forest health indicator species.
- It is listed as Near Threatened in IUCN Red List of Threatened Species.
- A study by the Zoological Survey of India (ZSI) has projected that numbers of this squirrel could decline by 90% in India by 2050.
- If urgent steps are not taken, the species could be extinct in the country in subsequent decades.
- This squirrel and its habitat are under threat from deforestation, fragmentation of forests, crop cultivation and over-harvesting of food, illegal trade in wildlife, and hunting for consumption.
- Slash-and-burn jhum cultivation in many areas of Northeast contribute to destruction of its habitat.
- India is home to three giant squirrel species.
- The other two – Indian Giant Squirrel and Grizzled Giant Squirrel – are found in peninsular India.

Arecibo telescope

- Puerto Rico's Arecibo telescope, the world's second-largest single-dish radio telescope built in 1963, has collapsed.
- The US National Science Foundation owned the telescope.
- Being the most powerful radar, scientists employed Arecibo to observe planets, asteroids and the ionosphere.
- It was helpful in making discoveries like finding prebiotic molecules in distant galaxies, the first exoplanets, and the first millisecond pulsar.

- In 1967, Arecibo was able to discover that the planet Mercury rotates in 59 days and not 88 days as had been originally thought.
- It also served as a hub in the search for extra-terrestrial life, and would look for radio signals from alien civilisations.
- It played a key role in tracking killer asteroids heading towards Earth.
- In 1993, it was used to provide a strict test of Einstein's Theory of General Relativity and the first evidence for the existence of gravitational waves.

IGP as Ammonia Hotspot

- A study by the Indian Institute of Technology (IIT) Kharagpur found that Indo-Gangetic Plain (IGP) is a global hot-spot of atmospheric ammonia.
- Atmospheric ammonia is typically generated due to agricultural activities including the use of nitrogenous fertilizers, manure management, soil and water management practices and animal husbandry.
- Satellite data used in the study on agricultural emissions show a positive correlation between atmospheric ammonia and fertilizer consumption.
- The general trend in atmospheric ammonia over India is negative in most seasons.
- Atmospheric ammonia plays a key role in the deterioration of air quality in India by actively contributing to the formation of secondary aerosols.
- The study has also recommended wider adoption of precision farming along with seasonal restrictions on the use of fertilizers.

Source: The Indian Express, The Hindu, PIB, New Indian Express

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