

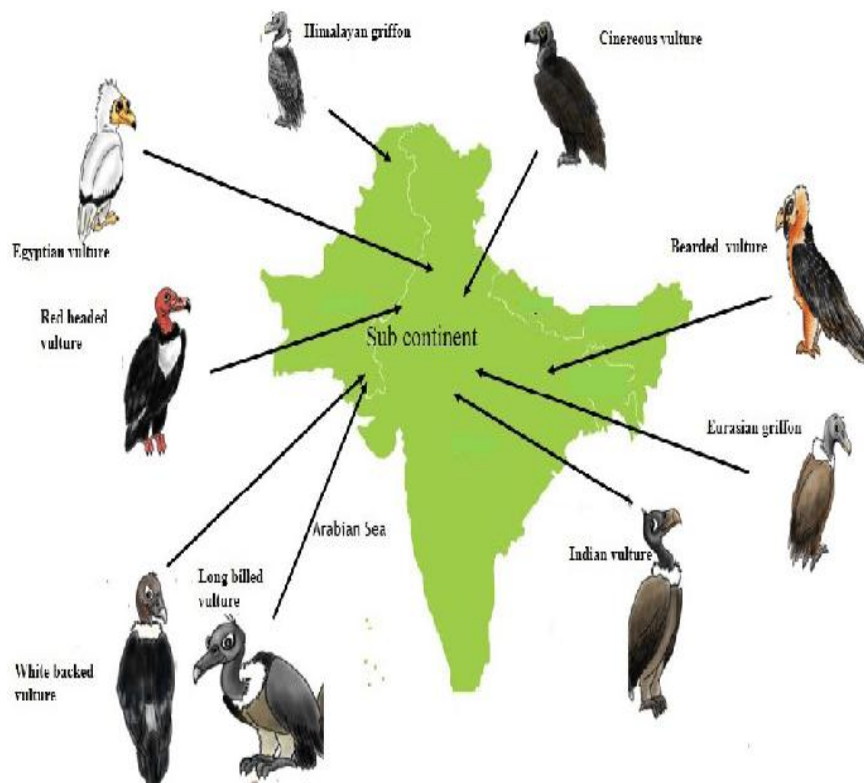
October - 22

TNPSC BITS

- ❖ The Union Ministry of Information and Broadcasting will set up an iGOT Lab to facilitate online learning for all employees within the Ministry.
- ❖ Nayab Singh Saini took oath as new Chief Minister of Haryana for the second term.
- ❖ Nikita Porwal from Madhya Pradesh was crowned Femina Miss India 2024 and Rekha Panday representing the Union Territories in second place.

TAMIL NADU

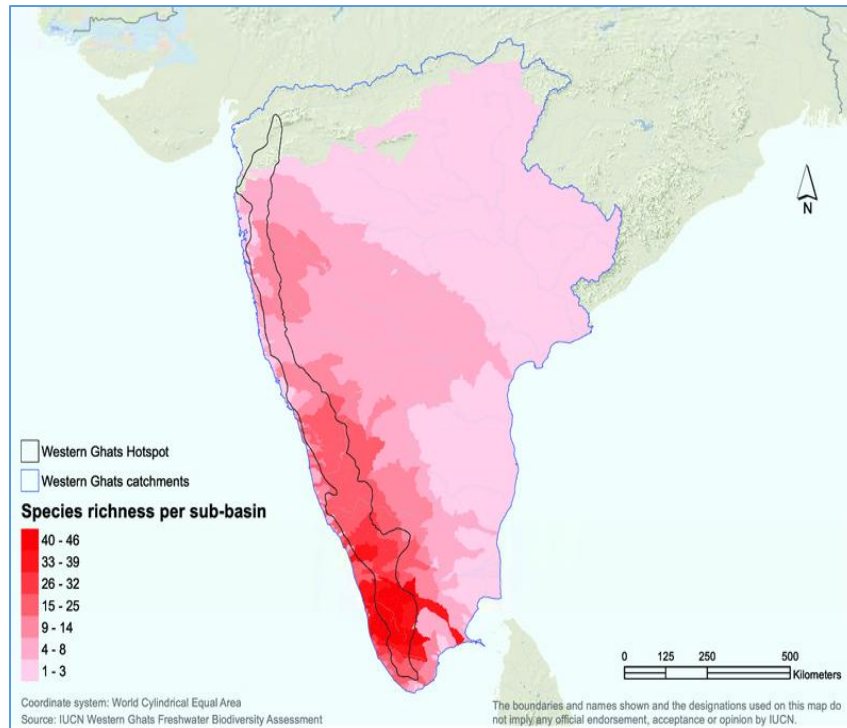
Long-billed vulture's nesting 2024



- ❖ The population of the critically endangered long-billed vulture (*Gyps indicus*) has seen a steady increase between 2015 and 2021.
- ❖ The species are exhibiting a 74% breeding success rate in the Mudumalai Tiger Reserve (MTR).
- ❖ Out of 31 nesting pairs of vultures recorded between the same period, there were 23 successful fledglings.

- ❖ The long-billed vulture is also known as the Indian vulture.
- ❖ It has witnessed an increase from 13 recorded individuals in 2016 to almost 28 reported individuals in 2021.
- ❖ This is an increase of almost 115% in the population in a span of five years.

Richness of threatened species 2024



- ❖ Biologists created a GIS-based database of 512 species of fauna for the study — ‘Village Level Distribution Mapping of Threatened Fauna of the Western Ghats’.
- ❖ With 98 species, Tamil Nadu’s Valparai is at the top of the list of 7,630 villages in the Western Ghats in terms richness of threatened species.
- ❖ The list included 133 species of fishes, 81 species of birds, 91 species of reptiles, 79 species of amphibians, 47 species of insects, 37 species of mammals and etc.
- ❖ Out of the 512 species, 27 were Critically Endangered, 131 Endangered, 117 Vulnerable, and 88 Near Threatened species, and the rest of the species were of Least Concern, Data Deficient, or Not Evaluated.
- ❖ Valparai, a hill station in Coimbatore district, topped the list with 98 species.
- ❖ It is followed by Kannan Devan Hills in Kerala (83), Greater Bombay (69), Kuttampuzha (64), Pariyaram (61), and Kumily (57) in Kerala.



- ❖ State-wise, Kerala topped the list with 354 species of threatened fauna, followed by Tamil Nadu (274), Karnataka (237), Maharashtra (171), Goa (104), and Gujarat (37).

NATIONAL

Minimum Support Prices hike 2025-26

- ❖ The Union government has announced minimum support prices (MSP) for six rabi crops for the 2025-26 rabi marketing season (RMS).
- ❖ Wheat, the country's second-largest crop, sees an increase of ₹150 per quintal, or 6.59 per cent, over its current MSP.
- ❖ The new MSPs for 2025-26 will be ₹2,425 per quintal for wheat, ₹1,980 for barley, ₹5,650 for gram, ₹6,700 for lentils, ₹5,950 for rapeseed and mustard, and ₹5,940 for safflower.

The Cabinet increased the minimum support prices for rabi crops

Crop	MSP for rabi 2025-26*	MSP for rabi 2024-25*	Increase in MSP
Wheat	₹2,425	₹2,275	₹150
Barley	₹1,980	₹1,850	₹130
Gram	₹5,650	₹5,440	₹210
Lentil (masoor)	₹6,700	₹6,425	₹275
Rapeseed & mustard	₹5,950	₹5,650	₹300
Safflower	₹5,940	₹5,800	₹140

(*per quintal)

Doctrine of Lis Pendens - Supreme Court

- ❖ The Supreme Court held that once a transaction is found to be hit by the doctrine of lis pendens, then the defences of being a bona fide purchaser and lack of notice regarding the sale agreement are not available.
- ❖ Lis pendens in common parlance means “a pending legal action”.
- ❖ The doctrine of Lis pendens finds its place in Section 52 of Transfer of Property Act.
- ❖ It provides that if there is any transfer of any immovable property pending litigation, the same shall not affect the rights of the parties in respect to the immovable property.



- ❖ But, the outcome of the litigation would be binding upon such a purchaser, who has purchased the property during the pending litigation.

DOCTRINE OF LIS PENDENS

'Lis' means action or Litigation (suit) and 'Pendens' means pending. Lis Pendens means 'pending litigation' or 'during the pendency of a suit'.

Section 52 of Transfer of Property Act, 1882 is based on the doctrine of Lis Pendens

This doctrine is based upon the maxim "ut lite pendente nihil innovator", means during the "pendency of litigation, nothing new should be introduced"

Cancer cases by 2045

	Rank	Cancer site	No of deaths	%
Brazil	1	Lung	38,292	12.5
	2	Colorectum	28,884	9.2
	3	Breast	22,189	13.9
	4	Prostate	19,958	13.5
	5	Stomach	18,138	5.9
Russian Federation	1	Lung	51,887	18.6
	2	Colorectum	41,447	13.3
	3	Stomach	27,306	9.2
	4	Breast	22,259	13.7
	5	Pancreas	20,672	7.2
India	1	Breast	98,337	13.7
	2	Lip, oral cavity	79,979	5.6
	3	Cervix uteri	79,906	11.2
	4	Lung	75,031	5.3
	5	Oesophagus	66,410	4.7

- ❖ Cancer cases and deaths in India are projected to surge between 2022 and 2045.
- ❖ 12.8% increase in cancer incidence in India in 2025 compared to 2020 and that cancer incidence is continuing to stand up.
- ❖ Among men in India, oral cancer, especially lip and mouth cancers, is the most common.
- ❖ Breast cancer is the leading cancer among women, and cervical cancer is also a major concern.
- ❖ Meanwhile, lung cancer is the most common type among women in China.

- ❖ BRICS nations are responsible for 42% of global cancer-related deaths.
- ❖ China bore the highest total productivity loss, estimated at \$28 billion.
- ❖ South Africa faced the highest cost per cancer death at \$101,000.

India – US Defense deal 2024

- ❖ India and the U.S concluded a \$3.5 bn deal for the procurement of 31 MQ-9B armed High Altitude Long Endurance (HALE) Remotely Piloted Aircraft Systems (RPAS).
- ❖ The deal also includes 170 AGM-114R Hellfire missiles; 16 M36E9 Hellfire captive air training missiles; 310 GBU-39B/B laser Small Diameter Bombs (SDB); and etc.
- ❖ Hellfire missile is one of the most popular short-range air-to-ground (sometimes air-to-air) laser-guided, subsonic tactical missiles.
- ❖ The AGM-114R multipurpose missile is the latest in the Hellfire II missile range (7-11km).
- ❖ The MQ-9B 'hunter-killer' drones are the high-altitude long-endurance drones.
- ❖ They are capable of remaining airborne for over 35 hours and can carry four Hellfire missiles and around 450 kgs of bombs.

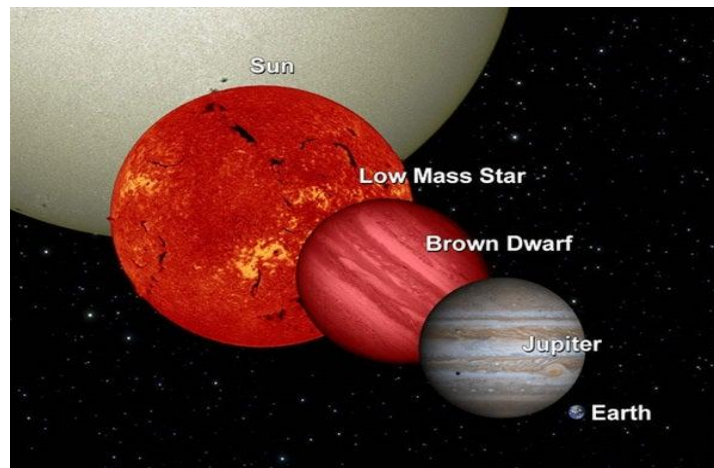


SCIENCE AND TECHNOLOGY

Mysterious Brown Dwarfs

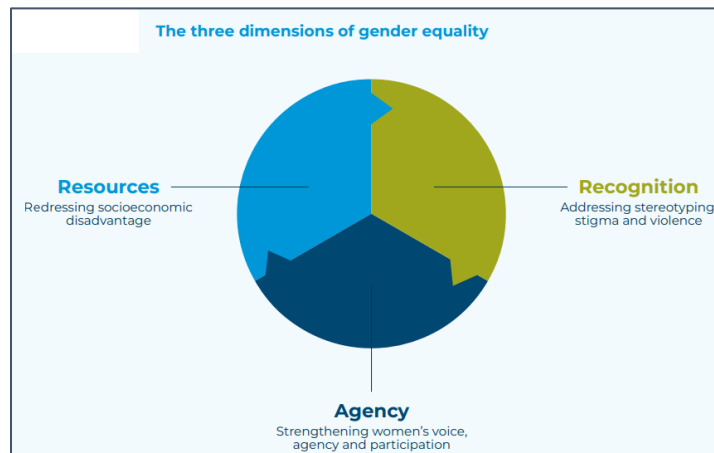
- ❖ In 1995, researchers observed a brown dwarf orbiting Gliese 229 – a red dwarf star located about 19 light-years from Earth.
- ❖ The brown dwarf names Gliese 229B was too dim for its mass.

- ❖ Its mass to be about 70 Jupiter masses, it should have been brighter than what telescopes had observed.
- ❖ Scientists suspected Gliese 229 B might be twins.
- ❖ The recent research results showed that Gliese 229 B consists of two brown dwarfs (Gliese 229 Ba and Gliese 229 Bb) about 38 and 34 times the mass of Jupiter.
- ❖ They orbit each other with a period of 12 days and a separation of 16 times the distance between Earth and the Moon.
- ❖ The observed brightness levels also match what is expected for two small brown dwarfs in this mass range.



REPORTS AND INDICES

United Nations Women's report 2024

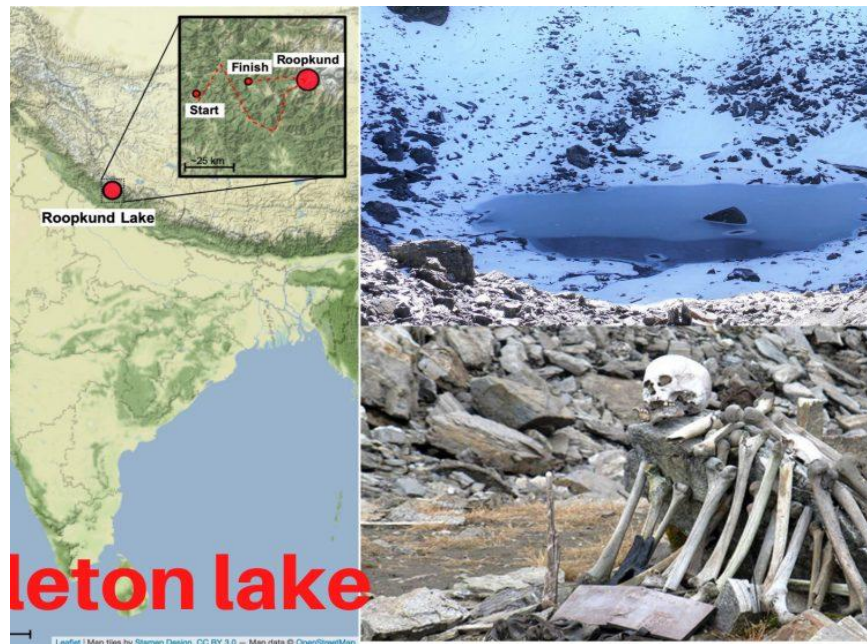


- ❖ The World Survey on the Role of Women in Development report was released recently.

- ❖ It was focusing on the theme, “Harnessing social protection for gender equality, resilience and transformation”.
- ❖ The paper is submitted every five years to the Economic and Financial Committee of the United Nations General Assembly.
- ❖ Over 63 per cent of women globally still give birth without access to maternity benefits.
- ❖ The rate rising to a staggering 94 per cent in sub-Saharan Africa.
- ❖ Women aged 25-34 are 25 per cent more likely than men of the same age to live in households facing extreme poverty.
- ❖ Nearly 1,000 social protection measures introduced by governments across 171 countries.
- ❖ But only 18 per cent focused on women’s economic security.

STATES

Uttarakhand's Roopkund Lake



- ❖ Roopkund Lake, Uttarakhand's trekking destination, is located 16,500 feet above sea level at the base of Mount Trishul.
- ❖ The lake's size is approximately two acres with a depth of around 9 feet.
- ❖ It is known as the "lake of skeletons", the glacial body conceals hundreds of human skeletons.

- ❖ The lake is now shrinking in both width and depth by about 0.1% to 0.5% annually.

MISCELLANEOUS

Mechazilla



- ❖ SpaceX has landed its Starship rocket using an innovative structure called "Mechazilla."
- ❖ This tall structure, equipped with massive mechanical arms, has transformed rocket recovery methods.
- ❖ Mechazilla is the nickname for the large 400-ft rocket-catching structure at SpaceX's Starbase in South Texas, USA.
- ❖ These arms are designed to catch the Super Heavy booster in midair as it returns to Earth.
- ❖ This new method of rocket recovery is far more efficient and reusable compared to traditional landing techniques.

Battle of Walong

- ❖ Indian Army commemorated the 62nd anniversary of the Battle of Walong fought during 1962 war with China.
- ❖ It honours the sacrifices of the brave soldiers and citizens of Walong.
- ❖ The battles were occurred at 3,000 to 14,000 feet.

- ❖ A small Indian troop, successfully halted the Chinese army's advance for 27 days in the challenging terrain of Kibithu, Walong, and Namti Tri Junction (Tiger's Mouth).

