

September - 15


TNPSC BITS

- ❖ Algeria's membership in the BRICS New Development Bank (NDB) has been officially approved and became the institution's ninth member.
- ❖ Union Bank of India becomes 1st major bank to become signatory of Partnership for Carbon Accounting Financials (PCAF).
- ❖ The two-day first International Solar Festival was held in New Delhi.
- ❖ Telangana has signed an MoU with the World Trade Centres' Association for the establishment of a World Trade Centre in the proposed AI City near Hyderabad.
- ❖ India's ancient activity, yogasana was included as a demonstration event at the 2026 Asian Games to be held in Aichi-Nagoya, Japan.
- ❖ In a first, India and the United Arab Emirates (UAE) signed a Memorandum of Understanding (MoU) for civil nuclear cooperation.
- ❖ The site for the new national Queen Elizabeth II Memorial has been announced by the UK government as St James's Park, London.
- ❖ Archer Harvinder Singh and sprinter Preethi Pal was participated as India's flag-bearers at the Paris 2024 Paralympics closing ceremony.

NATIONAL

Health Dynamics Report 2022-23

	<ul style="list-style-type: none"> • Number of Districts: 757 • Number of Villages: 664235 	
Health Facilities	Rural	Urban
No. of SCs	165639	3976
No. of PHCs	25354	6528
No. of CHCs	5491	868
No. of SDHs	1340	
No. of DHs	714	
No. of Medical Colleges	362	





- ❖ There is nearly 80 percent shortage of specialist doctors at community health centres (CHCs) across rural India.
- ❖ The country has more than 1 lakh 69 thousand Sub-Centres, approximately 32,000 Primary Health Centres, and 6,359 Community Health Centres.

- ❖ Additionally, there are 1,340 Sub-Divisional and District Hospitals, 714 District Hospitals, and 362 Medical Colleges.
- ❖ Only 4,413 specialist doctors of the requisite 21,964 needed in CHCs in March 2023 were available - a shortfall of 17,551 or 79.9 percent.
- ❖ There are 5,491 rural CHCs in 757 districts of the country.
- ❖ The availability of specialists at 868 CHCs in urban areas was slightly better at 56 percent.
- ❖ There are 27,304 doctors and specialists employed across 714 district hospitals in the country, against a sanctioned strength of 33,964.
- ❖ It means that nearly 20 percent of these seats are vacant.
- ❖ India's doctor-population ratio now is 1:836—higher than the WHO prescribed ratio of 1 doctor per 1000 population.

INTERNATIONAL

Taliban's new "Morality Law"

<ul style="list-style-type: none">• The law imposes severe restrictions on women, including mandatory coverage of their faces and bodies when outside and prohibitions on their voices being heard publicly. This is part of a broader pattern of limiting women's public roles and freedoms.• The law includes specific rules such as penalizing individuals for being late to prayers, interacting with non-family members of the opposite sex, or possessing personal photos 	<ul style="list-style-type: none">• The law restricts media content, banning anything that opposes Sharia law or depicts living beings. This limits press freedom and religious expression.• Some provisions in the law address the mistreatment of orphans and the practice of "bacha bazi," where boys are exploited and dressed as girls. These measures aim to protect vulnerable children.• While many restrictions have been informally enforced since the Taliban's return to power, the formal codification of these rules may lead to even stricter enforcement. 
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- ❖ Taliban supreme leader has directed officials to enact Afghanistan's "morality law".
- ❖ It is formalising and codifying the restrictions on women and other groups in the country.
- ❖ They published the 114-page code, the first formal enactment of such laws since the Taliban took power in August 2021.
- ❖ The code makes it mandatory for a woman to veil her entire body at all times in public, and deems a face covering.
- ❖ Women should not be heard singing or reading aloud even inside their homes.

- ❖ Women and men are forbidden from even looking at each other if they are not related by blood or marriage.
- ❖ Earlier the Taliban banned education for girls beyond Class 6.

Forum on China-Africa Cooperation (FOCAC) 2024



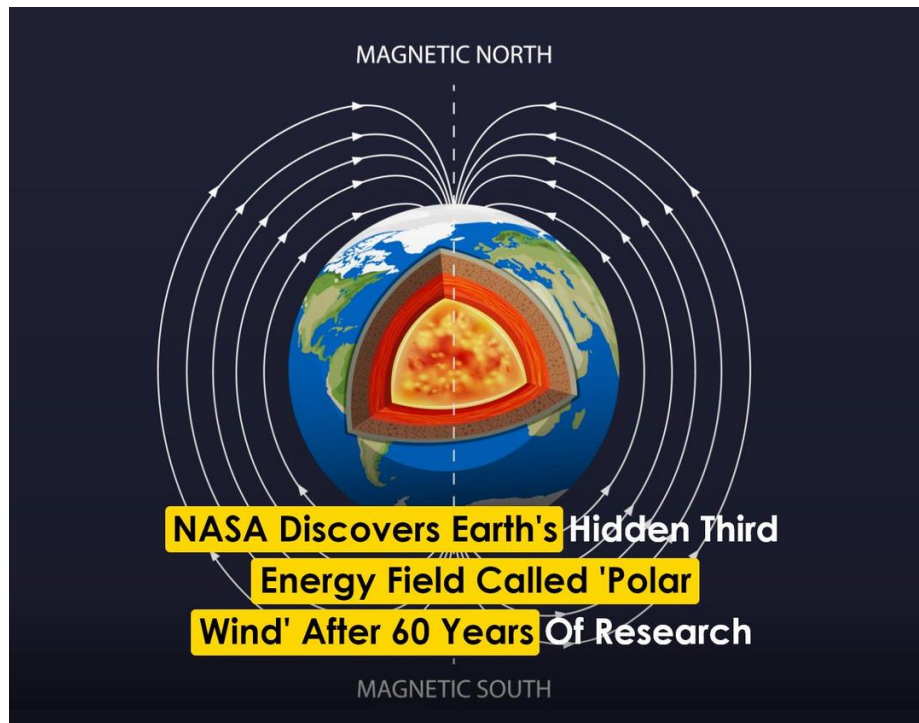
- ❖ China-hosted the Ninth edition of the Forum on China-Africa Cooperation (FOCAC) summit in Beijing.
- ❖ Chinese President Xi Jinping pledged \$51 billion of funding to African countries.
- ❖ The Forum on China-Africa Cooperation was established in 2000.
- ❖ It aims to formalise the strategic partnership between China and African nations.
- ❖ FOCAC Summit is conducted every three years, with the host alternating between China and an African member.
- ❖ The FOCAC counts 53 African nations as its members – the entire continent except Eswatini.
- ❖ Eswatini has diplomatic ties with Taiwan against Beijing's "One China" Policy.

SCIENCE AND TECHNOLOGY

Earth's third energy field - Polar Wind

- ❖ Earth's third energy field, ambipolar known as 'Polar Wind', is only existed in theory so far.
- ❖ It has now been discovered by Nasa after a search of 60 years.

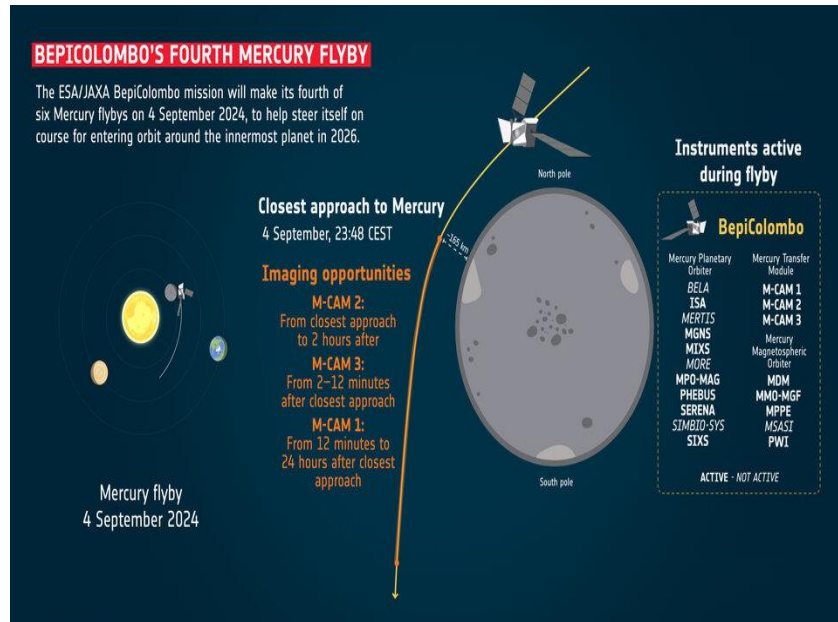
- ❖ Polar winds have crucial answers about how Earth's atmosphere evaporates rapidly above the north and south poles.
- ❖ The ambipolar field acts like a conveyor belt which lifts the atmospheric particles into space.
- ❖ Gravitational field is responsible for maintaining our atmosphere and if there were not enough gravity it would go into space.
- ❖ Magnetic field is the shield that protects planet Earth from the solar wind, the stream of charged particles released by the sun.
- ❖ Ambipolar field is counteracts gravity and ejects particles into space.



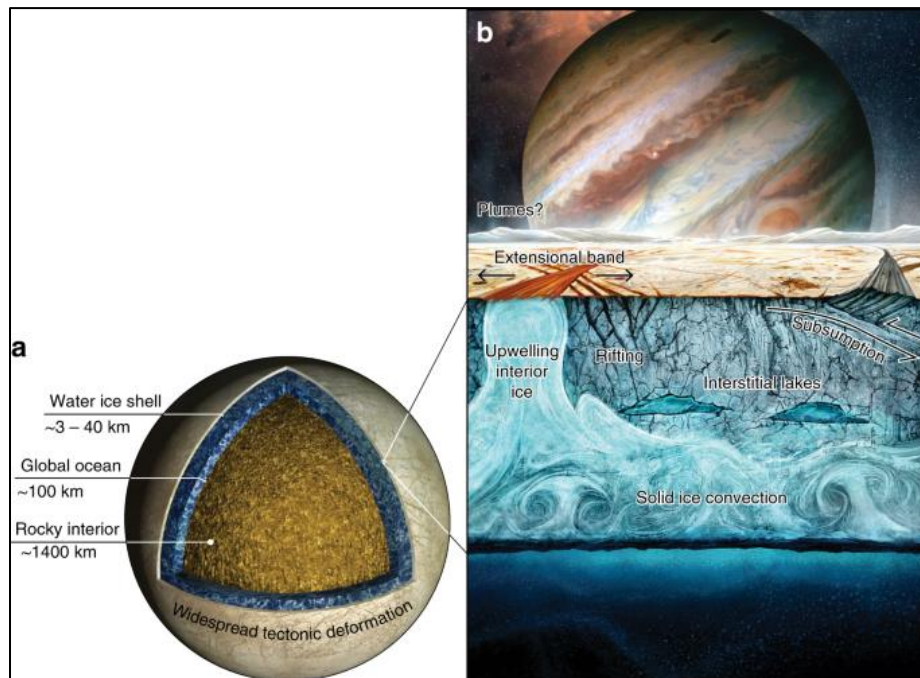
Mercury's south pole

- ❖ Recently the BepiColombo probe made its 4th flyby near Mercury.
- ❖ The satellite has approached the planet's surface at a record low distance of 165 kilometers.
- ❖ During the visit, the probe has taken the first ever images of Mercury's south pole.
- ❖ The historic photograph was taken when the probe was about 3,500 Km from Mercury's surface.
- ❖ The BepiColombo was Launched in October 2018.
- ❖ This probe consists of 2 spacecraft:

- Mercury Planetary Orbiter of the European Space Agency and
- Mercury Magnetospheric Orbiter of the Japan Aerospace Exploration Agency.



Europa Clipper Mission



- ❖ Nasa is all set to launch the Europa Clipper mission next month to explore Jupiter's moon Europa
- ❖ The Europa Clipper mission is costing \$5 billion.

- ❖ It aims to determine whether the ocean believed to exist beneath Europa's icy surface could support life.

ENVIRONMENT

New species of genus *Curcuma*

- ❖ Researchers have identified a new 'cousin' of the turmeric, *Curcuma ungmensis* in Nagaland.
- ❖ It belongs to the genus *Curcuma* (the ginger family Zingiberaceae).
- ❖ The family Zingiberaceae has 21 genera and about 200 taxa in India.
- ❖ *Curcuma* is one of the most important and largest genera of this plant family.
- ❖ *Curcuma longa*, black turmeric (*Curcuma caesia*) and mango ginger (*Curcuma amada*) are the well-known being turmeric.
- ❖ In India, the genus *Curcuma* is represented by about 40 species.
- ❖ They found mainly in northeast and southern States and the Andaman and Nicobar Islands.

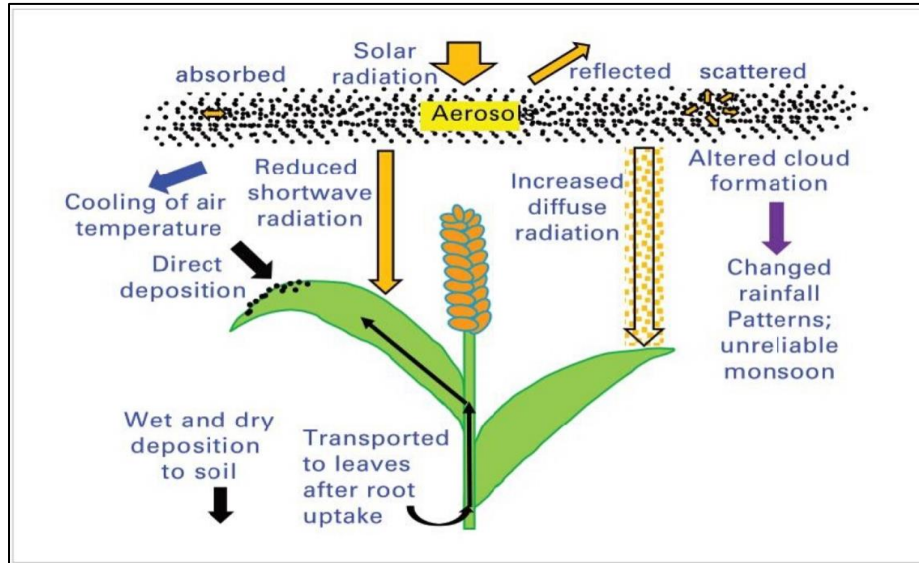


REPORTS AND INDICES

Air Quality and Climate Bulletin 2024

- ❖ United Nations' World Meteorological Organization (WMO) recently released its 4th annual Air Quality and Climate Bulletin.

- ❖ Europe and China show lower PM_{2.5} pollution.
- ❖ North America and India see increased emissions from anthropogenic activities.
- ❖ Global Particulate Matter hotspots include agricultural areas in Central Africa, Pakistan, India, China and South-East Asia.
- ❖ PM Reduces crop yields by 15% as it reduces sunlight reaching leaf surfaces.



STATES

Asian King Vulture Conservation Center



- ❖ India's first conservation and breeding centre for the Asian King Vultures was inaugurated in Gorakhpur Forest division.

- ❖ The facility is named as Jatayu Conservation and Breeding Centre.
- ❖ It aims to improve the population of the species, which has been listed as critically endangered in the IUCN red list since 2007.
- ❖ Six vultures (male and female) have been introduced to the facility.
- ❖ According to the action plan, the goal is to release 40 pairs of vultures from the centre over the next 8 to 10 years.

PERSONALITIES, AWARDS, AND EVENTS

Swachh Vayu Survekshan Award 2024



- ❖ It was presented to the best performing National Clean Air Campaign (NCAP) cities in three categories based on population.
- ❖ The winning cities are:
 - Category-1 (population over 10 Lakhs): Surat, Jabalpur, and Agra.
 - Category-2 (population between 3-10 Lakhs): Firozabad, Amravati, and Jhansi.
 - Category-3 (population under 3 Lakhs): Raebareli, Nalgonda, and Nalagarh.

SPORTS

US Tennis open 2024

- ❖ Italy's Jannik Sinner won his second Grand Slam title of 2024 by defeating Taylor Fritz (Germany) in the US Open Men's final.

- ❖ Sinner made history by becoming the first Italian man in the Open Era to win the US Open men's singles title.
- ❖ Aryna Sabalenka from Belarus has got past Jessica Pegula (USA) to win her first championship and third Grand Slam title of her career.
- ❖ She previously won the Australian Open women's singles title in both 2023 and 2024.
- ❖ Other winners:

Event	Winner	Runners-UP
Men's Double	Max Purcell and Jordan Thompson (Australia)	Kevin Krawietz and Tim Puetz (Germany)
Women's Double	Lyudmyla Kichenok (Ukraine) and Jelena Ostapenko (Latvia)	Kristina Mladenovic (France) and Zhang Shuai (China)
Mixed Doubles	Sara Errani and Andrea Vavassori (Italy)	Donald Young and Taylor Townsend (USA)

