

April - 13

TNPSC BITS

- ❖ Small business loans under the Pradhan Mantri Mudra Yojana (PMMY) witnessed record growth in disbursements in FY24 and also crossed the milestone of ₹5 lakh crore.
- ❖ Capital markets regulator Securities and Exchange Board of India (SEBI) has successfully obtained the ISO/IEC 27001:2022 certification for its information security management systems.
- ❖ The late Russian dissident Alexei Navalny and his wife Yulia will receive the "Freedom Prize of the Media".
- ❖ Briton, nicknamed 'Hardest Geezer', becomes first person to run length of Africa over 16,000 kilometres.
- ❖ Brit John Alfred Tinniswood (111) from England was confirmed as the new world's oldest man by Guinness World Records.
- ❖ The International Romani Day is observed on April 08 to celebrate Romani culture and raise awareness of the issues facing Romani people.

NATIONAL

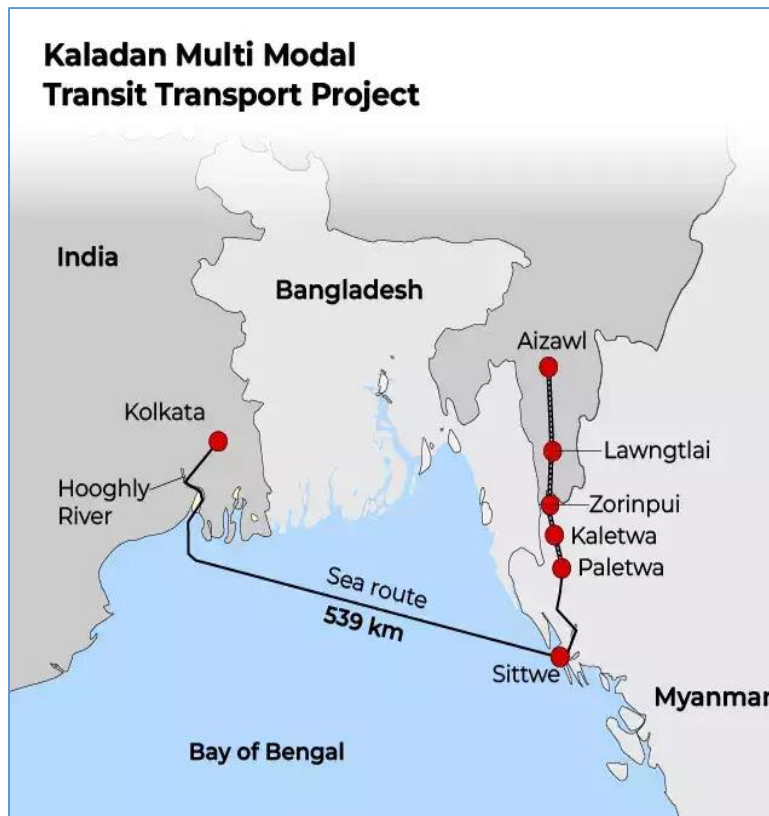
Right against climate change

MC Mehta vs Kamal Nath 2000	SC held that any disturbance of the basic environment elements , namely air, water and soil , which are necessary for 'life', would be hazardous to 'life' within the meaning of Article 21 of the Constitution . SC held that Right to life within Art 21 includes the right to live in a healthy environment, right to enjoy pollution-free water and air, and right to live in a pollution-free environment .
Virender Gaur vs State of Haryana 1995	It is the imperative duty of the State governments and municipalities to take adequate measures to promote, protect and improve both the man-made and the natural environment.
Karnataka Industrial Areas Development Board vs C Kenchappa, 2006	Supreme Court took note of the adverse effects of rising sea levels and rising global temperatures.
Bombay Dyeing & Mfg. Co. Ltd. (3) v. Bombay Environmental Action Group, 2006	Supreme Court recognised that climate change posed a "major threat" to the environment.

- ❖ The Supreme Court of India, for the first time, recognised the right against the adverse impacts of climate change.

- ❖ SC says, it is intertwined with the right to life and equality that are embedded in the Indian constitution.
- ❖ Article 21 recognises the right to life and personal liberty while Article 14 indicates that all persons shall have equality before law and the equal protection of laws.
- ❖ These Articles are important sources of the right to a clean environment and the right against the adverse effects of climate change,” it said.
- ❖ Article 48A of the Constitution provides that the State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.
- ❖ The Clause (g) of Article 51A stipulates that it shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures.

India's second overseas port



- ❖ After Chabahar, India has gained the rights to operate a second overseas port, Sittwe, in Myanmar.

- ❖ The Ministry of External Affairs (MEA) has approved a proposal for India Ports Global (IPGL) to take over the operations of the entire port located on the Kaladan River.
- ❖ IPGL is a joint venture between Jawaharlal Nehru Port Trust (JNPT) and Deendayal Port Trust (Erstwhile Kandla Port Trust).
- ❖ The Sittwe Port is part of the Kaladan multi-modal transit transport project.
- ❖ The project aims to connect the eastern Indian seaport of Kolkata with Sittwe seaport in Myanmar by sea, and further link Sittwe Port to Paletwa in Myanmar via Kaladan river waterway, and connect Paletwa to Zorinpui in Mizoram through a road component.

INTERNATIONAL

ZiG – Zimbabwe

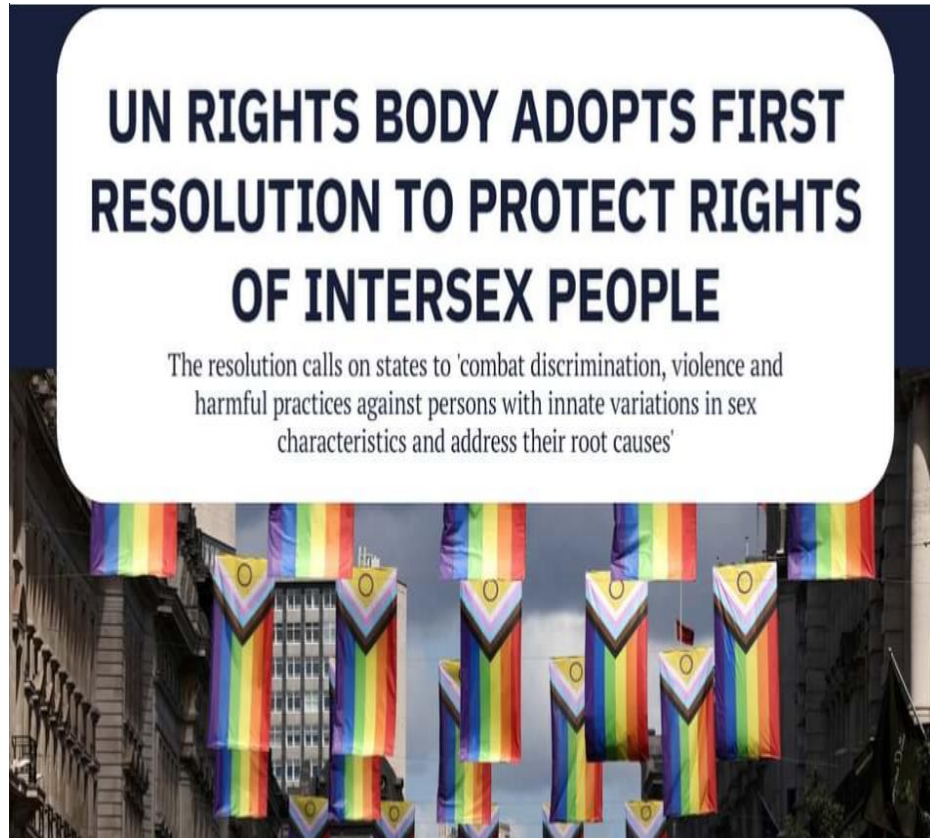


- ❖ Zimbabwe has introduced a new gold-backed currency called ZiG - the name stands for "Zimbabwe Gold".
- ❖ It is the latest attempt to stabilise an economy that has lurched from crisis to crisis for the past 25 years.
- ❖ Earlier it abolished its own currency and for many years only used foreign bank notes such as the US dollar and the South African rand.
- ❖ Annual inflation of Zimbabwe in March reached 55% - a seven-month high.

UNHRC Resolution on Intersex People

- ❖ The United Nations Human Rights Council voted to adopt a resolution designed to protect the rights of intersex people.

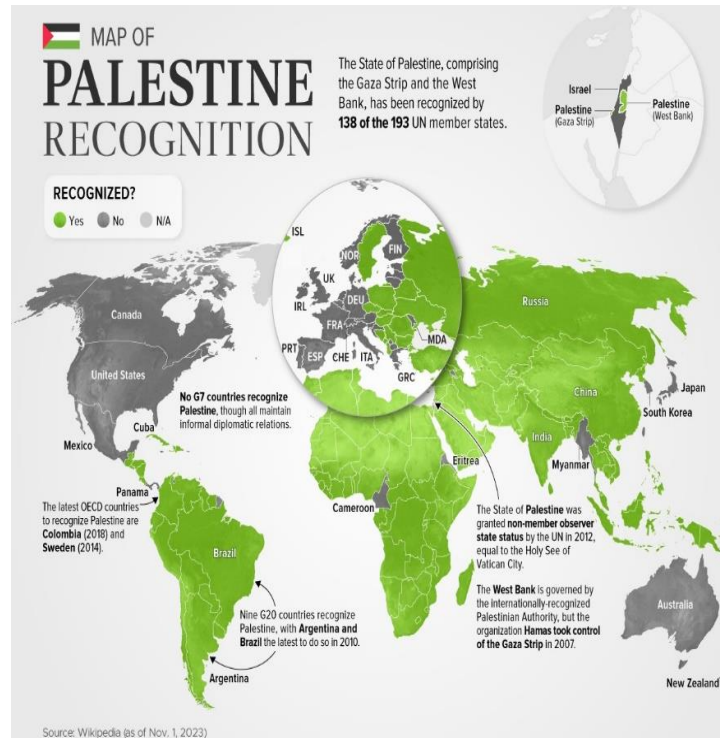
- ❖ This is the first initiative of its kind that diplomats and rights groups described as a landmark moment for human rights.
- ❖ Twenty-four countries voted in favour, twenty-three abstained and none voted against the resolution.
- ❖ It was spearheaded by Finland, South Africa, Chile and Australia.
- ❖ Around 1.7% of babies are born intersex, defined as having sex characteristics that do not fit binary notions of male or female.



Palestinian application to U.N. Membership

- ❖ The Palestinian Authority requested for renewed consideration by the UNSC of its 2011 application to become a full member of the world body.
- ❖ The Palestinians are a non-member observer state at the United Nations, the same status as the Holy See.
- ❖ The committee of the 15 members first assesses an application to see if it satisfies requirements for U.N. membership.
- ❖ The application can then either be dropped or put forward for a formal vote in the Security Council.

- ❖ Approval requires at least nine votes in Favor and no vetoes by the U.S., Russia, China, France or Britain.



SARAH AI by WHO

World Health Organization

Hello, I'm Sarah,
WHO's Digital Health Promoter

We're almost ready to begin. While I prepare the page for you, have a look at some of the topics I specialize in.

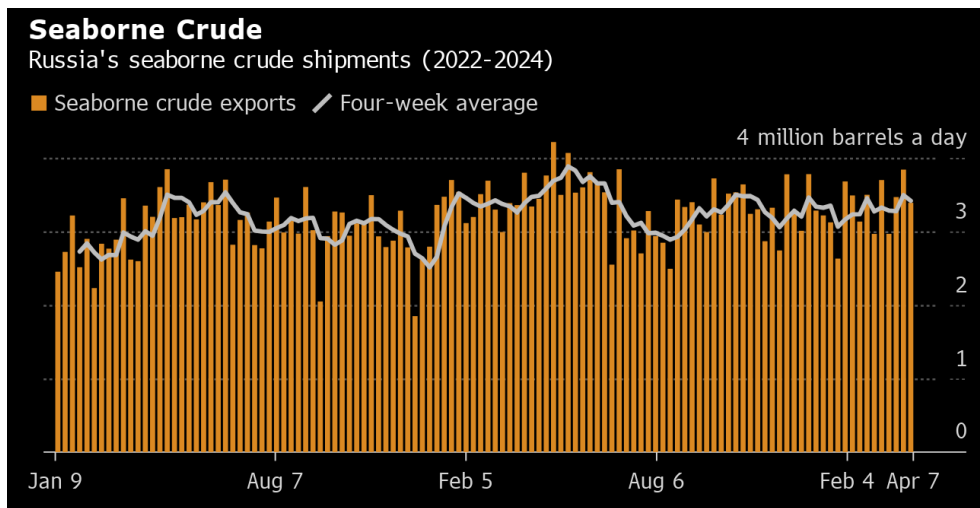
- Tobacco and E-Cigarettes
- Mental Health
- Healthy Eating
- Physical Activity

- ❖ World Health Organization has announced the deployment of the AI S.A.R.A.H (Smart AI Resource Assistant for Health).

- ❖ This digital health promoter prototype is equipped with empathetic response capabilities driven by generative artificial intelligence (AI).
- ❖ It offers engagement on health subjects 24/7 in 8 languages across various devices.

Largest buyer of Russian seaborne crude

- ❖ China has overtaken India as the primary importer of Russian crude oil via sea routes.
- ❖ In March, China imported 1.82 million barrels per day (bpd) of Russian crude by sea, surpassing India's 1.36 million bpd.
- ❖ Additionally, China also receives Russian oil through pipelines.
- ❖ India's recent slowdown in Russian crude imports is attributed to various sanctions and rising prices.
- ❖ India's Russian imports surpassed those from other countries, including Iraq and Saudi Arabia.



SCIENCE AND TECHNOLOGY

Terahertz anti-tampering tags

- ❖ MIT researchers have developed a new iteration of their anti-tampering ID tag using terahertz waves.
- ❖ This tiny tag is significantly smaller and cheaper than RFIDs.
- ❖ It will address a major vulnerability by incorporating microscopic metal particles into the glue that adheres the tag to an object.

- ❖ The terahertz waves are then used to detect the unique pattern formed by these particles on the item's surface, creating a fingerprint-like authentication system.
- ❖ The new anti-tampering tag prevents the counterfeiting by destroying the authentication pattern when the tag is peeled off and reattached to a fake item.
- ❖ The metal particles act as mirrors for terahertz waves, producing a distinct reflected pattern that is impossible to duplicate once the glue interface is compromised.

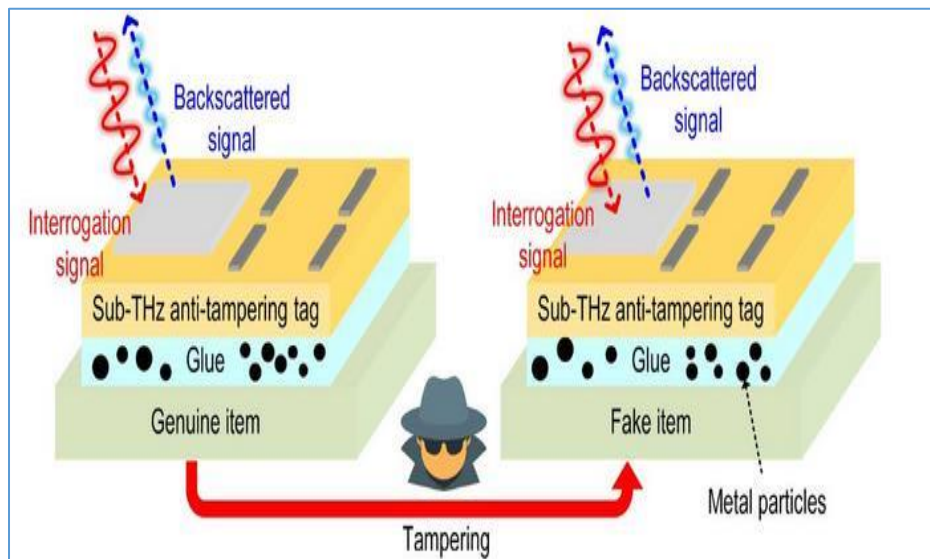
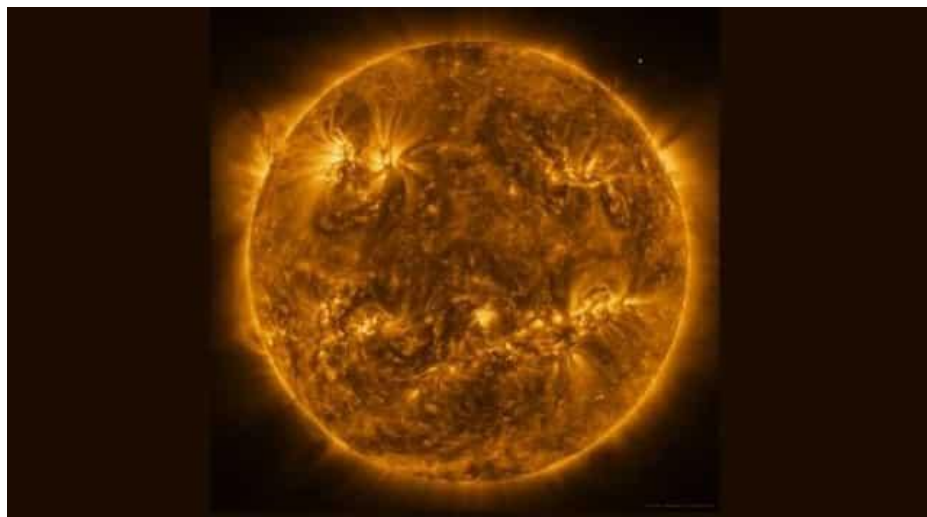


Image of the Sun's full disc



- ❖ The European Space Agency's Solar Orbiter has captured the most detailed image of the Sun's full disc and outer atmosphere, the corona, to date.

- ❖ The spacecraft took the images as it passed directly between the Earth and Sun at a distance of 75 million kilometres.
- ❖ It was revealing the intense environment of the Sun's upper atmosphere with a temperature of approximately one million degrees Celsius.

ENVIRONMENT

India Flora Online

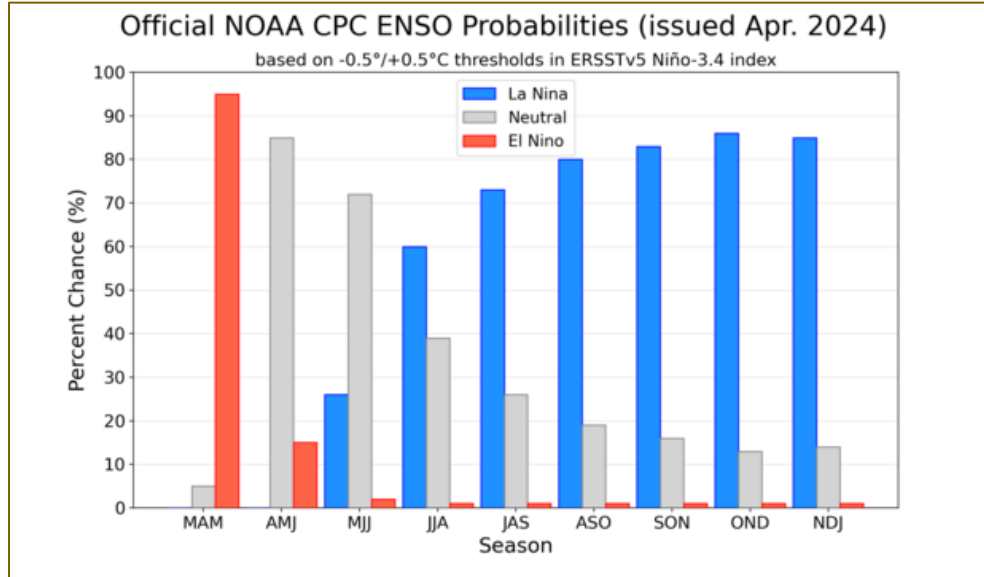
- ❖ The Indian Institute of Science (IISc.), launched “India Flora Online”, a digital database of the flora of India.
- ❖ It is the country’s most comprehensive attempt to document its plant wealth.
- ❖ It fulfils the country’s need of bringing the country’s plant or floral wealth into one searchable source.



Oceanic Niño Index

- ❖ US National Oceanic and Atmospheric Administration forecasts an 83% chance of the Oceanic Niño Index.
- ❖ It is a key measure of the El Niño-Southern Oscillation (ENSO), tracks sea surface temperatures in the tropical Pacific.

- ❖ The El Niño and La Niña, opposing phases of ENSO, impact global weather, ecosystems, and economies.
- ❖ El Niño brings warmer waters, while La Niña ushers in cooler conditions, occurring irregularly every two to seven years.



Forever chemicals by IIT Madras

HOW DO THESE CHEMICALS GET INTO WATER?

- These products release PFAS into the Perungudi dumpyard soil, and start contaminating leachate and groundwater
- Sewage also has PFAS, which explains the presence of these chemicals in the Adyar river and Buckingham canal, where untreated domestic wastewater is discharged.
- Many industries, including polymer manufacturing industries are situated near the Chembarambakkam lake, polluting it with PFAS.
- Health effects | liver damage, low infant birth weights, hormonal imbalance, fertility issues, immune system effects, and even cancer
- How to identify if the product you use has these chemicals? Look for ingredients 'perfluoro-' or 'polyfluoro-'

(Source: IIT-M study)

- ❖ A recent study by IIT Madras reveals the pervasive presence of 'forever chemicals' — pre- and polyfluoroalkyl substances (PFAS) — in Buckingham Canal, Adyar River and Chembarambakkam Lake.

- ❖ PFAS are a vast family of synthetic chemicals found in everyday products such as non-stick cookware, upholstery, food packaging, water or stain resistant coatings, and industrial materials.
- ❖ These chemicals do not degrade easily in the environment.
- ❖ These PFAS concentration in the city waters is about 19,400 times more of these 'forever chemicals' than the American Environmental Protection Agency's (EPA) safety levels.

Male Mosquitoes with Piercing Mouthparts



- ❖ Palaeontologists have described a new species of mosquito found in 125-million-year-old amber from Lebanon.
- ❖ The males of the new species unexpectedly had piercing mouthparts, armed with sharp mandibles, and were likely hematophagous.
- ❖ It suggests that male mosquitoes in the past fed on blood as well.
- ❖ The new specimens represent a new species of mosquitoes, *Libanoculex intermedius*.
- ❖ Mosquitoes are approximately 3,600 species of small flies comprising the family Culicidae.
- ❖ Female mosquitoes are among the most notorious hematophagous (blood-feeding) insects, sometimes causing severe allergic responses.

IMPORTANT DAYS

World health day 2024 - April 07

- ❖ On this day in 1948, the global health body WHO was founded.

- ❖ The WHO was established to address important health issues and work independently without the interference of any government.
- ❖ This day aims to raise awareness about pressing health issues, promote healthy lifestyles, and advocate for universal access to quality healthcare.
- ❖ Theme for this year is 'My Health, My Right'.

