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## **Current Affairs - 08 October 2024**

#### WORLD ASSOCIATION OF ZOOS AND AQUARIUMS (WAZA)



The World Association of Zoos and Aquariums (WAZA) recently suspended the membership of the Delhi Zoo over concerns about of Zoos and Aquariums the treatment of its lone African elephant named Shankar.

- It is the umbrella organization for the World Zoo and Aquarium community.
- Established in 1935, it is the only organisation representing zoos and aquariums at the global level.
- WAZA's mission is to guide, encourage, and support the zoos, aquariums, and likeminded organisations of the world in animal care and welfare, environmental education, and global conservation.
- Its **members** include leading zoos and aquariums, and regional and national **Associations** of Zoos and Aquariums, as well as some **affiliate organizations**, such as **zoo veterinarians or zoo educator**s, from all around the world.
- **Some of the activities** of WAZA are:
  - **Promoting cooperation** between zoological gardens and aquariums in relation to the conservation, management, and breeding of animals in captivity.
  - **Encouraging highest standards of animal welfare** and husbandry.
  - Promoting and coordinating cooperation between national and regional associations and their constituents.
  - Assist in representing zoological gardens and aquariums in other international organizations or assemblies.
  - Promoting wildlife conservation, environmental research. and environmental education.
- WAZA has **formed** partnerships with leading international **conservation** organisations. Together, they are committed to tackling global issues such as the illegal wildlife trade, coral-reef restoration, marine litter, sustainable palm oil and climate change.





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#### **BLACK CARBON**



According to a new study, India's reliance on kerosene-based lamps accounts for about 10 per cent of the total residential black carbon emissions.

- It is commonly **known as soot** and is a component of **fine particulate air pollution** (PM2.5).
- It is formed by the **incomplete combustion of wood and fossil fuels**, a process which also creates carbon dioxide (CO2), carbon monoxide, and volatile organic compounds.
- Most black carbon emissions in India arise from burning biomass, such as cow dung or straw, in traditional cookstoves.
- It has a warming impact on climate that is 460-1,500 times stronger than CO2.

#### **Impacts on Environment and Human Health**

- o It warms the atmosphere because it is very effective at absorbing light.
- It exacerbates the warming of the air and surfaces in regions where it is concentrated, altering weather patterns and ecosystem cycles.
- o It **lasts only days to weeks** in the atmosphere but has significant direct and indirect impacts on the climate, snow and ice, agriculture, and human health.
- It also influences cloud formation and impacts regional circulation and rainfall patterns.
- When deposited on ice and snow, black carbon and co-emitted particles reduce surface albedo (the ability to reflect sunlight) and heat the surface.
- It contributes to global warming and poses severe risks. Studies have found a
  direct link between exposure to black carbon and a higher risk of heart disease,
  birth complications, and premature death.





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#### WORLD TELECOMMUNICATION STANDARDIZATION ASSEMBLY



The World Telecommunication Standardization Assembly (WTSA) of the International Telecommunication Union (ITU) will be held in New Delhi from October 14 to 24, 2024.

- It has been held every **four years since 2002.**
- It serves as the governing conference of the **International Telecommunication**Union (ITU) Standardisation Sector (ITU-T).
- It is one of the three world conferences organized by the International Telecommunication Union.
- It defines the work program, working methods, and structure of study groups" for ITU's Telecommunication Standardization Sector
- This event plays a pivotal role in **setting global telecommunication standards**, making India's hosting of the WTSA a significant milestone.
  - WTSA 2024 will be preceded by the Global Standards Symposium (GSS) on October 14, 2024, at Bharat Mandapam, New Delhi.
  - The GSS is a high-level forum for policy debates on ICT standardization, addressing its evolving dynamics and technical implications.

#### **Key facts about International Telecommunication Union (ITU)**

- It is the **United Nations specialized agency** for information and communication technologies.
- It was **established in 1865** as the International Telegraph Union.
- In 1947 the ITU became a specialised agency of the United Nations.
- It is an intergovernmental organization that coordinates between governments and private sector bodies to global telecommunication and information communication technology (ICT) services.





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• **Member countries:** It has a membership of 193 countries and more than 1000 companies, universities and international and regional organizations.

#### • Functions:

- o allocate global radio spectrum and satellite orbits;
- o coordination and setting of technical standards related to telecommunication/ICT;
- work to improve access to ICTs in underserved communities worldwide;
- India and ITU: India has been an active member of the ITU since 1869 and has been a regular member of the ITU Council since 1952.
- **Headquarters:** Geneva, Switzerland.

#### WHAT IS MICRORNA?



The 2024 Nobel Prize for Medicine has been awarded to scientists Victor Ambros and Gary Ruvkun for their discovery of microRNA

— tiny molecules which play a crucial role in how genes function.

- MicroRNAs, or miRNAs, are small, **non-coding molecules of RNA**.
- They are typically around 19-24 nucleotides long and play an important role in determining how much messenger RNA (mRNA), which carries genetic information, eventually gets translated into protein.

#### Role in human body

- These microRNAs act as molecular switches, fine-tuning the expression of genes in different cell types and under varying conditions.
- They regulate the production of proteins by bonding with and subsequently silencing the mRNA at an appropriate juncture. The process is called posttranscriptional gene regulation.
- MicroRNAs help fine-tune various cellular processes like development, growth, and metabolism. Their role is essential in maintaining normal cell function, and disruptions in microRNA activity have been linked to diseases such as cancer.





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 Mutations in genes coding for microRNAs have been found in humans, causing conditions such as congenital hearing loss, eye and skeletal disorders.

#### • Significance of microRNA discovery

The discovery of microRNAs has provided scientists with new tools to investigate gene regulation and has significantly expanded our understanding of how genetic information is processed and utilized in living organisms.

#### VIVO CHINA SIPHONED OFF RS 70,000 CRORE UNDER GARB OF IMPORTS – ED

#### Vivo China siphoned off Rs 70,000 crore

#### • About the news

 ED has filed a chargesheet against Vivo China, accusing the company of siphoning off Rs 70,000 crore from India under the guise of import payments.

#### Allegations made by ED

- The ED claims that Vivo India remitted Rs 70,837 crore abroad since 2014,
   with large sums being sent to overseas entities controlled by Vivo China.
  - These entities, based in Hong Kong, Samoa, and the British Virgin Islands, were allegedly set up as trading companies to conceal their connection to Vivo China.

#### Modus operandi of these entities

- Hundreds of small companies controlled by Chinese nationals have dummy
   Indian directors and managers for a show of legitimacy.
- Many of these companies did not physically exist at their registered offices.
   However, their banking accounts were active and being operated from abroad.
- A cheap (and sometimes below production cost) pricing model that has given them control of a large chunk of the telecom and hardware markets in India.
- Investigations also show that some senior Chinese employees of these companies are documented members of the Chinese Communist Party.





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- Hence, Beijing has a strong leverage on their operations in India.
- Agencies also found a seamless flow of data to Chinese servers through remote access of modems, switches, routers and networks sold and installed by these companies in India.
- Similarly, a seamless data link through Chinese origin mobile phones was also established during investigations.
  - The data collected has helped Chinese artificial intelligence (AI) engines create portraits, with biometric details of millions of Indians.

#### **Steps Taken by The Government**

#### • Crackdown by investigating agencies

- Chinese commercial entities are under sustained investigation by the intelligence agencies since 2020.
- Multiple raids have been conducted by the ED under the provision of Prevention of Money Laundering Act.

#### • Clampdown on Chinese investment

- In 2020, Central govt declared that foreign investments from countries with which
   India shares land border shall be under approval route.
- Since China shares a land boundary with India, this announcement clamped down
  on investments from China making prior government clearance mandatory for all
  forms investments, even indirect ones.

#### Ban on Chinese app

The govt of India has banned more than 250 Chinese apps including PUBG Mobile, Tiktok, Shein, AliExpress and more.

#### Other steps

 Intelligence Bureau created a new wing — China Coordination Centre — to collaborate with financial enforcement agencies to investigate Chinese companies.





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#### WHAT IS NI-KSHAY POSHAN YOJANA (NPY)?



The Union Health Ministry has doubled the monthly nutrition support under Ni-Kshay Poshan Yojana from the existing Rs 500 to Rs 1,000 per month for all TB patients, during treatment.

- NPY was launched by the **Ministry of Health and Family Welfare (MoH&FW)** as a centrally sponsored scheme under the National Health Mission (NHM) in April 2018.
- It is a direct benefit transfer (DBT) scheme under the National Tuberculosis Elimination Program (NTEP) in India.
- **Objective:** Provide incentives for nutritional support to tuberculosis (TB) patients.
- **Beneficiary:** All notified TB patients are beneficiaries of the scheme.
- Eligibility:
  - All patients with TB who are notified to the government on or after April 1,
     2018, including those who are already being treated for TB, are eligible for financial incentives.
  - To be eligible for the incentives, patients must be registered or notified on the NIKSHAY portal.
- **Benefits**: Financial incentive of **1000/- per month** for each notified TB patient for the duration for which the patient is on anti-TB treatment.
- The incentives can be **distributed in Cash (only via DBT,** preferably through Aadhaar-enabled bank accounts) or in-kind.
- This scheme is **implemented across all States and UTs** in India.

#### WHAT ARE ADVANCED GLYCATION END PRODUCTS (AGES)?

A diet rich in Advanced Glycation End Products (AGEs) is among the leading causes of India being the world's diabetic capital, notes a first-of-its-kind clinical trial finding published recently.





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- AGEs (also known as **glycotoxins**) are **harmful molecules** formed by the **glycation and**oxidation of lipids and proteins.
  - $\,\circ\,$  Glycation is the process of combining other molecules with sugars.
  - Oxidation is the process of combining other molecules with oxygen.
- AGEs are formed in your body by metabolism, but the major source of AGEs is food.
- They are formed in food by grilling, toasting, roasting, broiling, frying, and other hightemperature cooking.
- **Tobacco use** is yet another source of AGEs.
- AGE production in the body increases with age.
  - o Why are AGEs harmful?
  - AGEs are present in the body at all times. At low levels, they don't cause significant injury.
  - However, they cause cell and tissue damage when they reach high concentrations.
  - AGEs combine with receptors located on blood vessels and several other organs to cause damage to organ systems.
  - These compounds can impact the function of proteins within the cells, alter the behavior of hormones, cytokines, and free radicals, and modify the extracellular matrix between cells.
  - AGEs activate inflammatory and other destructive processes in many systems of your body.
  - AGEs are involved in the development of various chronic inflammatory diseases such as type II diabetes mellitus, vascular and cardiovascular diseases, osteoporosis, and arthritis.
  - Hyperglycemia(high blood levels of glucose) is one condition associated with more AGE production, causing blood vessel damage in people with diabetes.





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#### STATE OF GLOBAL WATER RESOURCE REPORT 2023

According to the State of Global Water Resource Report 2023, the year 2023 marked the driest year for global rivers in over three decades.



- It is an annual report published by the World Meteorological Organization (WMO) since 2021.
- It offers a comprehensive and consistent overview of water resources worldwide.
- It is based on input from dozens of National Meteorological and Hydrological Services and other organizations and experts.

#### **Highlights of the 2023 Report:**

- The year 2023 marked the driest year for global rivers in 33 years.
- o The **last five consecutive years** have recorded widespread **below-normal conditions for river flows,** with reservoir inflows following a similar pattern.
- It notes that 2023 was also the second consecutive year in which all regions in the world with glaciers reported ice loss, the year in which "glaciers suffered the largest mass loss ever registered in 50 years.
  - More than 600 gigatons (Gt) of water were lost across all glaciated regions of the world.
- The report says that 6 billion people currently face inadequate access to water at least one month a year, and this is expected to increase to more than 5 billion by 2050.
- The world is far off-track with Sustainable Development Goal 6 on water and sanitation.