



MARCH, 2024



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CSE, ESE, PSUs, State Services Exams, SSC and Banking Exams

1st MARCH, 2024

Lancet study on Global Obesity

• **Context:** According to Lancet study on Global Obesity rates, the obesity rates among children and adolescents worldwide have increased four times from 1990 to 2022. Meanwhile, obesity rates among adults have more than doubled.

Key Highlights:

- The Study conducted by NCD Risk Factor Collaboration (NCD-RisC), in collaboration with the World Health Organization (WHO)
- NCD Risk Factor Collaboration (NCD-RisC) is a global network of health scientists offering thorough and prompt data on risk factors for non-communicable diseases (NCDs)
- More than one billion people worldwide are living with obesity. Specifically, in 2022, there were 159 million children and adolescents, as well as 879 million adults, who were obese.
- The obesity rate for girls rose from 0.1% in 1990 to 3.1% in 2022, while for boys, it increased from 0.1% to 3.9%.
- In terms of obesity rates among girls and boys, India ranked 174th globally in 2022.
- Among women, the obesity rate surged from 1.2% in 1990 to 9.8% in 2022, while among men, it rose from 0.5% to 5.4%.
- This discovery is important given India's existing high rates of non-communicable diseases, including heart disease, strokes, and diabetes.
- Obesity significantly increases the risk of developing these diseases, including Type 2 diabetes in teenagers, at an early age.
- Obesity, as per the World Health Organization (WHO), refers to an excessive accumulation of fat that can be harmful to health. A body mass index (BMI) over 25 is considered overweight, and over 30 is classified as obese.

India's first indigenously built hydrogen fuel cell ferry

• **Context:** Prime Minister Modi inaugurated India's first indigenously built hydrogen fuel cell ferry under the Harit Nauka initiative.

Key Highlights:

- It is a 24-meter catamaran which can accommodate 50 people in its air-conditioned passenger area. The accommodation is made of high-quality fiberglass reinforced plastic, resembling metro train coaches.
- This boat uses a 50-kilowatt PEM (proton-exchange membrane) fuel cell along with Lithium-Ion Phosphate batteries. PEM fuel cells have the advantage of quickly adjusting their output to match power demands.
- This boat has five hydrogen cylinders that hold 40kg of hydrogen, providing support for eight hours of operations. Additionally, the vessel is equipped with a 3-kilowatt solar panel.
- A hydrogen fuel cell creates electricity using the chemical energy in hydrogen and only emits pure water, without releasing pollutants.
- CSL developed the vessel automation system and power management system. The hydrogen fuel cell system was developed by KPIT Technologies, Pune, in collaboration with the Council of Scientific and Industrial Research Labs.
- It produces zero emissions or noise, and it is energyefficient. It will also make urban mobility smooth and easy.
- Since it has no moving parts, the ferry needs less maintenance than combustion vessels.

About Harit Nauka Initiative:

- In 2024, the shipping ministry unveiled the Harit Nauka guidelines for inland vessels.
- Under this initiative, all states have to make efforts to use green fuels for 50 per cent of inland waterwaysbased passenger fleets in the next one decade, and 100 per cent by 2045.

GWMO 2024: Global Waste Management Outlook

 Context: The United Nations Environment Programme (UNEP) has released the report titled Beyond an age of waste: Global Waste Management Outlook 2024 (GWMO 2024).

Key Highlights:

- Every year across the globe more than two billion tonnes of municipal solid waste (MSW) is generated.
- More than a third of the world's population is drowning in waste, with over 2.7 billion people in the Global South and developing regions of the world not having their waste collected.
- An estimated 540 million tonnes of municipal solid waste, an equivalent of 27 percent of the global total waste, is not being collected.
- It also predicted that waste generated was set to grow in volumes — from 2.3 billion tonnes in 2023 to 3.8 billion tonnes by 2050.
- The negative impacts of municipal solid waste on the climate, biodiversity and human health will almost double by 2050.

2nd MARCH, 2024

Juice Jacking: Cyberattack

• **Context:** Recently, the Reserve Bank of India (RBI) issued a warning against charging mobile phones using public ports.

Key Highlights:

- It is a type of cyberattack where hackers tamper with public USB charging ports, infecting them with malware or making hardware changes that allow them to steal data from devices connected to them.
- Most attacks target both Android and iOS mobile devices, with older devices being particularly vulnerable due to their outdated software.
- When users connect their devices to compromised USB ports, hackers use the connection to hack into

mobile devices and steal personal data like email, SMS, and saved passwords or deliver malware by gaining access to the phones.

International Big Cat Alliance (IBCA)

 Context: The Union Cabinet approved the creation of International Big Cat Alliance (IBCA) to set up a global network for the conservation of tigers and other big cats.

Key Highlights:

- The alliance was conceived as a multi-country, multi-agency coalition of 96 big cat range countries and others to establish a common platform for conservation.
- Focus of the Alliance is to conserve seven big cats of the world which includes Tiger, Lion, Leopard, Snow Leopard, Puma, Jaguar and Cheetah.
- In India out of the seven big cats only five tiger, lion, leopard, snow leopard and cheetah are found.
- The government also approved a one-time budgetary support of 150 crore for a period of five years from 2023-24 to 2027-28.
- IBCA governance consists of an Assembly of Members, Standing Committee and a Secretariat with its Head Quarter in India.

Semiconductors Plants in India

• **Context:** The government approved proposals to set up three semiconductor units in Gujarat and Assam with an estimated investment of Rs 1.26 lakh crore.

- A semiconductor fabrication plant will be set up by Tata Electronics and Taiwan's Powerchip Semiconductor Manufacturing Corp (PSMC) in Gujarat's Dholera.
- The Tata Group will also set up a chip assembly plant in Morigaon, Assam at a cost of Rs 27,000 crore.
- CG Power and Japan's Renesas will also set up a semiconductor plant in Gujarat's Sanand at an estimated cost of Rs 7,600 crore.

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- Semiconductors also referred to as 'chips' are highly complex products to design and manufacture, providing the essential functionality for electronic devices to process, store and transmit data.
- The chip comprises interconnections of transistors, diodes, capacitors and resistors, layered on a wafer sheet of silicon.

3rd MARCH, 2024

World Wildlife Day

 Context: Every year on 3rd of March, the entire world celebrates World Wildlife Day to spread awareness regarding sustainable practices for conserving biodiversity.

Key Highlights:

- The UN General Assembly adopted a resolution in December 2013 and designated March 3 as World Wildlife Day in 2014.
- The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), was signed on this day in 1973.
- CITES is a global agreement to ensure that international trade in specimens of wild animals and plants does not threaten their survival.
- The WWF Environmental Information and Assessment Center Program (EIACP PC-RP), operating under the Ministry of Environment, Forest and Climate Change, marked the day at the Okhla Bird Sanctuary.
- Theme: "Connecting People and Planet: Exploring Digital Innovation in Wildlife Conservation".

PM-JANMAN housing Scheme

• **Context:** The lack of data regarding the estimated total population of the Particularly Vulnerable Tribal Groups (PVTG) has posed challenges in implementing the housing component of the PM-JANMAN Scheme.

Key Highlights:

• The Union Cabinet approved the scheme in 2023 and the scheme is implemented during FY 2023-24 to 2025-26.

- The Mission would provide PVTG families and communities (Particularly Vulnerable Tribal Groups) essential services.
- The 11 crucial interventions including Central Sector and Centrally Sponsored Schemes through 9 Ministries, including the Ministry of Tribal Affairs include:
 - 1. Provision of pucca houses
 - 2. Connecting roads
 - 3. Providing Piped water supply
 - 4. Ensuring Community water supply
 - 5. Providing Mobile medical units with medicine cost
 - 6. Construction of hostels
 - 7. Providing Vocational education and skilling
 - 8. Construction of Anganwadi Centres
 - 9. Construction of Multipurpose Centres (MPC)

Climate-related Financial Risks, 2024

• **Context:** The Reserve Bank of India (RBI) has released a draft Disclosure Framework on Climate-related Financial Risks, 2024 for banks to follow.

- The regulated entities i.e., banks are meant to disclose information about their climate related financial risks and opportunities for the users of financial statements.
- It acknowledges the importance of the environment and its long-term impact on organisations and the economy as a whole.
- The RBI has defined climate-related financial risks as the potential risks that may arise from climate change or from efforts to mitigate climate change, their related impacts and economic and financial consequences.
- It can impact the financial sector through two broad channels i.e., physical risks and transition risks.
- Physical Risks: It refers to the economic costs and financial losses resulting from the increasing frequency and severity of extreme climate changerelated weather events.

- Transition Risks: It refers to the risks arising from the process of adjustment towards a low-carbon economy. A range of factors influences this adjustment, including changes in climate-related policies and regulations, the emergence of newer technologies, shifting sentiments and behaviour of customers. The process of transition i.e., reducing carbon emissions may have a significant impact on the economy.
- There is an urgent need for a better and consistent disclosure framework for regulated entities, without which the financial risks can lead to mispricing of assets and misallocation of capital.
- This essentially led to a standard disclosure framework on climate related financial risks.

4th MARCH, 2024

PM Surya Ghar Muft Bijli Yojana

 Context: Recently, the Union Cabinet approved PM Surya Ghar Muft Bijli Yojana to provide 300 units of free electricity to 1 crore families.

Key Highlights:

- It aims to light up 1 crore households by providing up to 300 units of free electricity every month, marking a significant step towards sustainable development and people's wellbeing.
- It was launched with an investment of over Rs. 75,000 crores.
- Under this scheme, households will be provided with a subsidy to install solar panels on their roofs.
- The subsidy will cover up to 40% of the cost of the solar panels. The remaining costs have to be borne by the aspirant consumer.
- The Centre will fund 60% of the cost for installing 2 kW (kilowatt) systems and 40% of the cost for systems from 2-3 kW capacity. Systems of higher wattage will not be eligible for Central subsidy.
- At current benchmark prices, this will mean ₹30,000 subsidy for 1 kW system, ₹60,000 for 2 kW systems and ₹78,000 for 3 kW systems or higher.

- A Model Solar Village will be developed in each district of the country to act as a role model for adoption of rooftop solar in rural areas.
- Urban Local Bodies and Panchayati Raj Institutions shall also benefit from incentives for promoting RTS installations in their areas.
- The scheme provides a component for payment security for renewable energy service company (RESCO) based models as well as a fund for innovative projects in RTS.

Shehbaz Sharif: Pakistan's Prime Minister

• **Context:** Shehbaz Sharif was elected as the Prime Minister of Pakistan by the country's National Assembly.

Key Highlights:

- Sharif's election follows contentious parliamentary elections that took place on February 8th. The electoral process was marred by allegations of manipulation and the prolonged announcement of results.
- The newly formed coalition government has substantial challenges, primarily in addressing the ailing economy.
- Pakistan is at risk of debt default due to escalating inflation, diminishing foreign reserves, and a worsening currency crisis.

5th MARCH, 2024

BioTRIG: Waste Management Technology

• **Context:** A recent study has claimed that BioTRIG, a new waste management technology, could help rural Indians.

Key Highlights:

• It is a new waste management technology which works on the pyrolysis system.

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- Pyrolysis is a kind of chemical recycling that turns leftover organic materials into their component molecules.
- Waste is sealed inside an oxygen-free chamber. The sealed waste is then heated above 400 degrees Celsius. During this process, useful chemicals are produced.
- BioTRIG generates three valuable products: Bio-oil, Syngas and Biochar fertilizer.
- The bio-oil is a clean-burning alternative to dirty cooking fuels in homes.
- The syngas and bio-oil facilitates heating and powers the pyrolysis system, and surplus electricity is utilised to power supply to local homes and businesses,
- Biochar improves soil fertility and helps store carbon.
- The BioTRIG system could help to reduce greenhouse gas emissions from communities by nearly 350 kg of CO2-eq per capita per annum.

Swachhta Green Leaf Rating (SGLR) initiative

• **Context:** Recently, the Department of Drinking Water & Sanitation (DDWS), Ministry of Jal Shakti, in collaboration with the Ministry of Tourism launched the Swachhta Green Leaf Rating (SGLR) initiative.

Key Highlights:

- Swachhta Green Leaf Rating Initiative is a government initiative to ensure world-class hygiene and sanitation in the hospitality sector.
- The primary goal is to prevent pollution in water bodies and maintain a clean environment.
- It is launched by The Department of Drinking Water & Sanitation (DDWS), Ministry of Jal Shakti, in collaboration with the Ministry of Tourism
- The initiative promotes sanitation, waste management, and reduced plastic use in hospitality.
- Its rating system applies to all types of accommodations, assessing compliance with guidelines.

6th MARCH, 2024

Shanan Hydropower Project

 Context: The Union Government ordered that status quo be maintained on the Shanan hydropower project, over which Punjab and Himachal Pradesh have made competing claims.

Key Highlights:

- It is a British-era 110-MW hydel project, situated at Jogindernagar in Mandi district of Himachal Pradesh, which was leased to Punjab in 1925.
- The lease agreement was signed between the then ruler of Mandi, Raja Joginder Bahadur, and a British representative and Chief Engineer of Punjab. The 99-year-old lease came to an end on March 2.
- In the past few years, Himachal has contended that the project should stay with it once the lease ends.

MethaneSAT: A satellite to track Methane

 Context: MethaneSAT, a satellite designed to track and measure methane emissions globally, was launched aboard a SpaceX Falcon9 rocket from California.

- It is an Earth observation satellite designed to monitor and study global methane emissions to aid in combating climate change
- Agencies Involved are The Environmental Defense Fund (EDF), Harvard University, the Smithsonian Astrophysical Observatory, and the New Zealand Space Agency
- MethaneSAT will make 15 orbits around the Earth each day, observing the activities of the oil and gas industry.
- It will generate extensive data to indicate "where methane originates, who is accountable, and whether emissions are increasing or decreasing over time."

- The data collected by MethaneSAT will be freely available to the public in almost real-time.
- The satellite, equipped with a high-resolution infrared sensor and a spectrometer, which will help fill important data gaps.
- It can detect changes in methane levels as small as three parts per billion in the atmosphere, allowing it to identify smaller sources of emissions compared to previous satellites.
- MethaneSAT also boasts a broad camera perspective, covering approximately 200 km by 200 km, enabling it to detect larger emitters known as "super emitters".
- The launch of MethaneSAT coincides with a time when the world is adopting stricter methane management policies.
- Over 150 countries signed the Global Methane Pledge in 2021, aiming to reduce their combined methane emissions by at least 30% from 2020 levels by 2030.
- Additionally, at COP 28, more than 50 companies pledged to significantly reduce methane emissions and routine flaring. MethaneSAT will support these efforts by assisting in achieving these targets.

7th MARCH, 2024

Chakshu Portal

• **Context:** The Department of Telecommunications (DoT) recently launched 'Chakshu' on Sanchar Saathi, aiming to foster stakeholder collaboration against telecom misuse in cyber-crime and financial frauds.

Key Highlights:

 'Chakshu' is a citizen-centric facility introduced on the Sanchar Saathi portal by the Department of Telecommunications (DoT). It aims to empower individuals to report suspected fraud communications received via various channels, including calls, SMS, or WhatsApp.

- Citizens can utilize 'Chakshu' to report various types of fraudulent activities, such as KYC-related frauds, impersonation as government officials or relatives for financial gain, sextortion, and other forms of communication aimed at defrauding individuals.
- The facility simplifies the process of reporting suspected fraud communications, enabling citizens to take proactive measures to combat fraudulent activities. By providing a user-friendly interface on the Sanchar Saathi portal, 'Chakshu' encourages swift and efficient reporting.
- By leveraging citizen participation, 'Chakshu' facilitates collaboration between the public and relevant authorities, including law enforcement agencies, telecom service providers, and other stakeholders. This collaborative approach enhances the effectiveness of efforts to combat fraudulent activities.
- Through 'Chakshu,' citizens can play an active role in safeguarding themselves and others from falling victim to fraud schemes. By promptly reporting suspicious communications, individuals can help prevent financial losses and protect the integrity of the communication network.
- 'Chakshu' is seamlessly integrated into the broader framework of initiatives undertaken by the DoT to enhance cyber-security and protect citizens from fraudulent activities. It complements existing tools and platforms, further strengthening the nation's cyber-resilience.
- In addition to facilitating reporting, 'Chakshu' contributes to raising awareness and educating citizens about the various forms of fraud prevalent in the digital landscape. By empowering individuals with knowledge and resources, the facility promotes a culture of cyber-awareness and vigilance.

60th edition of Venice Biennale

• **Context:** The 60th edition of the Venice Biennale, known as "the Olympics of the art world", will open on April 20, 2024.

- The Venice Biennale is one of the biggest and most prestigious art fairs in the world, beginning in 1895.
- Biennale is an Italian word which means 'every other year'. Over the years, however, it has come to mean a large international exhibition that takes place every two years.
- Biennales feature contemporary art by artists from various countries that are usually linked by a common curatorial theme, providing a framework for exploring contemporary social, economic and political ideas in an international context.
- India made its debut at the Biennale in 1954. Recording robust sales, the exhibition comprised over 50 paintings of masters such as M F Husain, S H Raza, Jamini Roy, Amrita Sher-Gil, and Francis Newton Souza.
- After 1954, the country officially participated in the event in 2011. The exhibition was organised by Lalit Kala Akademi and curated by Ranjit Hoskote. It featured works by artists like Zarina Hashmi, Gigi Scaria, Praneet Soi, and the Desire Machine Collective.
- At the 2019 Venice Biennale, the Ministry of Culture, Confederation of Indian Industry, National Gallery of Modern Art, and Kiran Nadar Museum of Art (KNMA) in collaboration organised the Indian pavilion.