



WEEKLY CURRENT AFFAIRS

OCTOBER, 2023

Week-4

22-31 Oct., 2023

★★ Useful for ★★

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

22nd OCTOBER, 2023

APAAR: One Nation, One ID

- **Context:** The Union Education Ministry has introduced the concept of 'One Nation, One Student ID' referred to as APAAR ID.

Key Highlights:

- This concept is in alignment with the National Education Policy (NEP) 2020. The policy aims to create unique ID numbers for school students across India.
- APAAR stands for 'Automated Permanent Academic Account Registry'.
- It is a 12 digit digital identification system for school students in India. It will give each student enrolled from pre-primary to higher education a unique identification number.
- It will digitally store academic qualifications, credit scores, certificates, and other academic data of students.
- The enrolment process will be carried out by the school, with the consent of the students' parents.
- The parents can withdraw their consent at any given point in time.
- The data will be shared only with concerned government agencies if and when required.
- The data collected on each student by the schools will be stored in a centrally functioning District Information for Education portal.
- APAAR is like a lifelong ID that helps you keep track of your school journey and achievements.
- You can store your exam results, what you've learned and even your extra accomplishments like Olympiad rankings or receiving specialized skill training
- It also makes switching schools easier because all the documents for admission are in one place.

Vienna Convention

- **Context:** Canada has accused India of violating the Vienna Convention after India had asked for

a reduction in the number of Canadian diplomats posted in India.

Key Highlights:

- The Vienna Convention on Diplomatic Relations is an international treaty signed in 1961.
- To put forth a framework for diplomatic interactions between independent nations and aims to ensure the development of friendly relations among nations.
- Signed by: At present 193 countries are party to the convention.
- The convention formalizes the longstanding practice of diplomatic immunity. It grants diplomatic missions privileges that enable diplomats to perform their functions without fear of coercion or harassment by the host country.
- India has said that its actions are as per provisions of Article 11.1 of the Vienna Convention on Diplomatic Relations (VCDR).
- Article 11.1 pertains to the size of international missions within other countries.
- It provides the receiving state the right to limit the size of a diplomatic mission to what it considers reasonable and normal.

■ NOTE: _____

- **Article 11:** If there is no specific agreement on the number of diplomats allowed in a mission, the receiving State (host country) can set limits.
- The host country can determine the reasonable and normal size of a diplomatic mission.
- This determination can be made based on the circumstances and conditions in the host country and the specific needs of the mission.

23rd OCTOBER, 2023

Standards & Labelling Programme

- **Context:** The Government has launched the Standards & Labelling Programme for solar panels.

Key Highlights:

- It was launched by Bureau of Energy Efficiency (BEE).
- To provide consumers an informed choice about the energy and cost-saving potential of the star labelled appliances/equipment being sold in the Indian market.
- The scheme involves laying down energy performance norms for appliances/equipment by rating its energy performance on a scale of 1 to 5 with 5 star labelled appliance being the most energy efficient one.
- The program presently covers 34 appliances. Out of which 15 appliances are under the mandatory regime which means these appliances cannot be sold in the market without the label and 19 appliances are in voluntary regime where the market is in development stage.
- The scheme has resulted in overall electricity saving of 70.56 billion units translating to an abatement of 57.05 million ton of CO emission in FY 2021-2022.
- Standards & Labelling Programme for solar panels aim to help the Indian customers to make an informed decision by helping citizens to know which brands of solar panels are more or less efficient.
- The labelling will be voluntary for the first two years from January 1, 2024, to December 31, 2025. During this period, no labelling fee will be charged.
- The program is expected to enhance Solar PV module efficiency by 2% over its existing levels.
- Due to this performance improvement, the electricity generation is expected to increase by 33GWh/year and this will offset ~27,000 tons of CO₂ emission per annum.

Gaganyaan's first Flight Test Vehicle Abort Mission-1 (TV-D1)

- **Context:** The Indian Space Research Organisation (ISRO) has launched Gaganyaan's first Flight Test Vehicle Abort Mission-1(TV-D1).

Key Highlights:

- Flight Test Vehicle Abort Mission 1 (TV-D1) is the first of two abort missions to test crew safety mechanisms for the Gaganyaan mission.

- To check the effectiveness of Crew Escape System(CES) in taking the Crew Module(CM) to safety in case of an emergency during the Gaganyaan mission.
- The test vehicle is a single-stage liquid rocket.
- It carries the Crew Module (CM) and Crew Escape Systems (CES) along with other components like the CM fairing (CMF) and Interface Adapters.
- The CM is the part where astronauts will stay during the Gaganyaan mission. For this test (TV-D1), an unpressurized version of CM is used.
- The flight will simulate the abort condition.CES with CM will be separated from the Test Vehicle at an altitude of about 17 km.
- Subsequently, the abort sequence will be executed with the separation of CES, parachutes deploying and eventually, the CM landing safely in the sea.
- The success of this test flight will set the stage for the remaining qualification tests and unmanned missions, leading to the first Gaganyaan mission with Indian Astronauts.

Mid-Planning Conference for Multilateral Naval Exercise (MILAN) – 24

- **Context:** The Mid Planning Conference (MPC) of MILAN 24 (Multilateral Naval Exercise – 2024) was hosted by the Indian Navy at Visakhapatnam.

Key Highlights:

- MILAN is Biennial multilateral naval exercise
- It was started by Indian Navy in 1995
- To enhance professional interaction between friendly foreign navies and learn from each other's strengths and best practices in the maritime domain.
- The exercise began with the participation of just four countries: Indonesia, Singapore, Sri Lanka, and Thailand.
- Over the years, it has grown in terms of both the number of participants and the complexity of exercises. In 2022, 39 countries participated in Milan exercise.

- The exercise originally aligned with India's 'Look East Policy'. It later expanded to include more countries as part of India's 'Act East Policy' and the Security and Growth for All in the Region (SAGAR) initiative.
- This expansion involved nations from both the western Indian Ocean Region (IOR) and the countries along the IOR coast.
- Exercise MILAN 2024 is likely to witness the largest-ever participation with invites being extended to over 50 countries.
- The exercise aligns with India's G20 Presidency and the theme "Vasudhaiva Kutumbakam" emphasizing global unity.

24th OCTOBER, 2023

Cyclone Tej

- **Context:** The India Meteorological Department (IMD) predicted that Cyclone Tej, a depression gathering force in the Arabian Sea, intensified into an 'extremely severe cyclonic storm' near the coasts of Oman and Yemen.

Key Highlights:

- It developed from a low-pressure area in the southeast Arabian Sea and intensified into a depression.
- Currently, it is moving west-northwest towards Maharashtra's coast.
- Cyclone Tej may bring heavy rainfall, strong winds, storm surges, and coastal flooding to the affected areas.

About India Meteorological Department (IMD):

- It was established in 1875.
- It is the principal government agency in all matters relating to meteorology and allied subjects.
- It is under the Ministry of Earth Sciences (MoES).

Global Tax Evasion Report 2024

- **Context:** The European Union Tax Observatory in its 'Global Tax Evasion Report 2024' calls for 2% global wealth tax on billionaires.

Key Highlights:

- Report shows that global billionaires have very low personal effective tax rates of between 0% and 0.5% of their wealth.
- A persistently large amount of profit, nearly \$1 trillion, is shifted to tax havens in 2022, which is equivalent to 35% of all the profits booked by multinational companies outside of their headquarter country.
- The global loss of tax revenue due to this shifting appears to have stagnated at about 10% of corporate tax revenue collected.
- The global minimum tax has been dramatically weakened.
- In 2021, more than 140 countries and territories agreed to implement a pioneering minimum tax of 15% on multinational profits, which was expected to increase global tax revenues by 10%.
- The report red-flagged the trend of 'greenwashing the global minimum tax' wherein MNCs can use 'green' tax credits for low carbon transition to reduce their tax rates way below the minimum of 15%.
- New forms of aggressive tax competition are emerging with adverse effects on government revenue and inequality.
- The ongoing subsidies race for green-energy producers may more than offset the revenue gains from the global minimum corporate tax.
- The report makes recommendations to reconcile globalisation with tax justice with a common theme of focusing on reducing the tax deficit of multinational companies and wealthy individuals. These include:
 - Reform the international agreement on minimum corporate taxation to implement a rate of 25% and remove the loophole in it that fosters tax competition.
 - Introduce a new global minimum tax for the world's billionaires equal to 2% of their wealth.
 - Institute mechanisms to tax wealthy people who have been long-term residents in a country and choose to move to a low-tax country.

- Implement unilateral measures to collect some of the tax deficits of multinational companies and billionaires in case global agreements on these issues fail.
- Move towards the creation of a Global Asset Registry to better fight tax evasion.
- Strengthen the application of economic substance and anti-abuse rules.

Electoral Bonds

- **Context:** The former Chief Election Commissioner of India, SY Quraishi, spoke on the need for transparency in political funding and Electoral Bonds.

Key Highlights:

- Government of India notified the Electoral Bond scheme in 2018.
- An electoral bond is like a promissory note that can be bought by any Indian citizen or company incorporated in India from select branches of State Bank of India.
- The citizen or corporate can then donate the same to any eligible political party of his/her choice.
- The bonds are issued in multiples of Rs 1,000, Rs 10,000, Rs 100,000 and Rs 1 crore.
- The receiver can encash the bonds through the party's verified account. The electoral bond will be valid only for fifteen days.
- The electoral bonds are available for purchase for 10 days at the beginning of every quarter.
- An additional period of 30 days shall be specified by the government in the year of Lok Sabha elections.
- Any party that is registered under section 29A of the Representation of the Peoples Act, 1951 and has secured at least one percent of the votes polled in the most recent General elections or Assembly elections is eligible to receive electoral bonds.
- The electoral bonds will not bear the name of the donor. Thus, the political party might not be aware of the donor's identity.

- A donor will get a deduction and the recipient, or the political party, will get tax exemption, provided returns are filed by the political party.

25th OCTOBER, 2023

Small Savings Instruments (SSIs)

- **Context:** The government raised the interest rate on the five-year recurring deposit scheme for the December quarter and retained the rates for all other small savings schemes.

Key Highlights:

- They are a set of savings instruments managed by the central government with an aim to encourage citizens to save regularly irrespective of their age.
- It comprises instruments, including the National Saving Certificate (NSC), Public Provident Fund (PPF), Kisan Vikas Patra (KVP) and Sukanya Samriddhi Scheme.
- The money raised from people who save through these schemes goes to the Centre and is put into a fund called the National Small Savings Fund (NSSF).
- The government resets the interest rate at the beginning of every quarter.
- Theoretically, since 2016, interest rate re-setting has been based on yields of government securities of the corresponding maturity, with some spread on the scheme for senior citizens, as advised by the Shyamala Gopinath Committee.
- National Savings (Monthly Income Account) Scheme, 2019 has been amended through National Savings (Monthly Income Account) (Amendment) Scheme, 2023 and the maximum investment limit has been raised from ₹ four lakh fifty thousand to ₹ nine lakh for a single account and from ₹ nine lakh to ₹ 15 lakh for a joint account with effect from 1st April 2023.
- Likewise, the Senior Citizen Savings Scheme, 2019 has been amended through Senior Citizens Savings (Amendment) Scheme, 2023 and the maximum investment limit has been raised from ₹ 15 lakh to ₹ 30 lakh.

Matsya Sampada Jagrukta Abhiyan

- **Context:** Union Minister Fisheries, Animal Husbandry & Dairying, launched Matsya Sampada Jagrukta Abhiyan on the occasion of completion of three successful years of implementation of Pradhan Mantri Matsya Sampada Yojna (PMMSY).

Key Highlights:

- It is the flagship scheme of the Department of Fisheries, Ministry of Fisheries, Animal Husbandry & Dairying, and was launched in 2020.
- Aim: To give momentum to the 'sunrise' fisheries sector through consolidated efforts from various schemes and initiatives.
- The PMMSY is an umbrella scheme with two separate Components namely Central Sector Scheme (CS) and Centrally Sponsored Scheme (CSS).
- The Centrally Sponsored Scheme (CSS) Component is further segregated into Non-beneficiary oriented and beneficiary orientated subcomponents/activities:
 1. Enhancement of Production and Productivity
 2. Infrastructure and Post-harvest Management
 3. Fisheries Management and Regulatory Framework.

26th OCTOBER, 2023

Operation Chakra-II

- **Context:** The Central Bureau of Investigation (CBI) has launched Operation Chakra-II.

Key Highlights:

- It was launched by Central Bureau of Investigation (CBI) to fight against transnationally organized cyber-enabled financial crimes in India.
- For the operation, CBI has partnered with Microsoft and Amazon as well as with national and international agencies to combat and dismantle infrastructure of illegal call centers.
- Most of the illegal call centers raided by CBI posed as Microsoft and Amazon customer support.

- These call centers target vulnerable individuals and defraud thousands annually.
- That is why, Microsoft and Amazon have collaborated with CBI to share critical information and help Indian law enforcement agencies in their investigations

IFFCO's Nano DAP (Liquid) Plant

- **Context:** The Union Minister of Cooperation has inaugurated IFFCO's Nano DAP (Liquid) Plant at Kalol in Gandhinagar, Gujarat.

Key Highlights:

- Nano-DAP (Di-ammonium Phosphate) is a nanotechnology-based agri-input developed by the Indian Farmers Fertilizer Cooperative Limited (IFFCO).
- It will have 8% nitrogen and 16% phosphorus compared to 18% nitrogen and 46% phosphorus contained in the conventional granular bag.
- A 500 ml bottle of nano-DAP is equal to a 50kg bag of regular DAP. The cost of a bottle of nano-DAP is ₹600 (without subsidy) while conventional DAP is priced at ₹1,350 per bag (with fertilizer subsidy).
- IFFCO has obtained a 20-year patent for nano-urea and nano-DAP, entitling them to receive a 20% royalty for global usage of these products.

Pradhan Mantri Anusuchit Jaati Abhyuday Yojana (PM-AJAY)

- **Context:** The Scheme of Pradhan Mantri Adarsh Gram Yojana (PMAGY), which is now being implemented as 'Adarsh Gram' component of the Scheme of Pradhan Mantri Anusuchit Jaati Abhyuday Yojana (PM-AJAY), has been designed with an area based approach, wherein villages having high density of Scheduled Castes (SCs) populations are taken up for holistic development.

Key Highlights:

- PM-AJAY nodal Ministry is Ministry of Social Justice & Empowerment

- **The scheme is a merger of 3 Centrally Sponsored Schemes namely:** Pradhan Mantri Adarsh Gram Yojana (PMAGY), Special Central Assistance to Scheduled Castes Sub Plan (SCA to SCSP) and Babu Jagjivan Ram Chhatrawas Yojana (BJRCY).
- To reduce poverty within Scheduled Caste (SC) communities by creating additional job opportunities through skill development, income-generating initiatives, and more.
- To enhance socio-economic development indicators by providing necessary infrastructure and essential services in SC-dominated villages.
- **The Scheme has three components:**
 - 1. Development of SC dominated villages into an "Adarsh Gram":** It aims to ensure integrated development of SC majority villages so that they have adequate infrastructure.
 - 2. Grants-in-aid' for District/State-level Projects:** It offers financial support for district or state-level projects with the aim to improve the socio-economic conditions of SC communities. This may include the construction of infrastructure in SC-dominated villages, including those chosen under the Adarsh Gram component as well as the establishment of hostels and residential schools.
 - 3. Construction of Hostels in higher educational institutions** which are top-ranked as per the National Institutional Ranking Framework (NIRF) of Government of India and are funded by the Centre/State/UT Governments either fully or partially. schools which are either fully or partially funded by the Centre/State/UT Governments and recommended by the Ministry of Education.

27th OCTOBER, 2023

Purple Economy

- **Context:** Shanti Raghavan is the recipient of the Business Line Change makers Award in 2020. She leads an organization called EnAble India. It is working on creating a purple economy.

Key Highlights:

- Purple Economy obtains its name from the color adopted by many feminist movements.
- It represents a new vision of economics that recognizes the importance of care work, empowerment and autonomy of women.
- **There are four pillars of the purple economy:**
 - 1. Universal Care Services:** To address gender and class disparities, ensure that professional care services are accessible to all households, either through publicly funded or state-subsidized private services.
 - 2. Work-Life Balance in the Job Market:** Implement measures for a fairer distribution of care responsibilities between genders, like parental leave and reduced work hours.
 - 3. Alleviate Rural Unpaid Work:** Reduce the extra care giving burden on women and girls in rural areas by improving infrastructure to save time spent on tasks like fetching water, farming and cooking.
 - 4. New Economic Policies:** Support these measures with macroeconomic policies that generate jobs, allocate resources for care services, invest in rural infrastructure and ensure effective regulations to make these changes a reality.

World Energy Outlook 2023

- **Context:** The International Energy Agency (IEA) has released the World Energy Outlook 2023.

Key Highlights:

- World Energy Outlook 2023 released by International Energy Agency (IEA) to provide in-depth analysis and strategic insights into every aspect of the global energy system.
- Fossil fuel share in the global energy supply is projected to reduce from around 80% to 73% by 2030.
- Investment in clean energy has risen by 40% since 2020.
- India is expected to have the highest growth in energy demand over the next three decades.

- But India's industrial sector will emit 30% less CO₂ by 2030 and passenger cars will emit 25% less CO₂ per kilometer driven.
- This is due to the government policies in addressing climate commitments through increased efficiency and new technologies.
- **Initiatives taken by India to reduce carbon emissions:**
 - 1. International Solar Alliance (ISA):** Launched in 2015, it's an alliance of the "sunshine countries" with an objective of efficient utilization of solar energy.
 - 2. One sun, one world, one grid project along with the United Kingdom:** It is based on the vision of building and scaling inter-regional energy grids to share solar energy across the globe.
 - 3. Accelerating e-mobility transition** with the Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles Scheme.
 - 4. Mission LiFE is a global mass movement** led by India that aims to encourage individual and collective action to protect and preserve the environment.
 - 5. Leadership Group for Industry Transition (LeadIT):** It is a business-led initiative that encourages companies to adopt low-carbon business practices and technologies
- But the government amended the surrogacy act in 2023 which banned the use of donor gametes. It required "intending couples" to use their own gametes for surrogacy. Against this, a petition was filed in the Supreme Court arguing that the amendment violated a woman's right to parenthood.
- The petitioner argued that the amendment contradicted Surrogacy Act, 2021 which recognised the situation when a medical condition would require a couple to opt for gestational surrogacy in order to become parents.
- However, the government argued that surrogacy could only be availed if the child was "genetically related" to the intending couple.
- The Supreme Court found the amendment contrary to the main provisions of the Surrogacy Act.
- The court said that the Surrogacy Act recognizes medical conditions necessitating gestational surrogacy and the amendment cannot contradict this.

28th OCTOBER, 2023

Mayer Rokitansky Kuster Hauser (MRKH) syndrome

- **Context:** The Supreme Court has allowed a woman with Mayer-Rokitansky-Kuster-Hauser (MRKH) Syndrome to undergo surrogacy using a donor egg.

Key Highlights:

- Mayer-Rokitansky-Kuster-Hauser (MRKH) Syndrome is a rare congenital disorder that affects the female reproductive system. This condition is characterized by an underdeveloped vagina and uterus.
- The woman suffers from Mayer Rokitansky Kuster Hauser syndrome. Medical records confirm her inability to produce eggs or have a uterus. Due to this, the couple began the gestational surrogacy process.

Universal Basic Income

- **Context:** Recently, localized experiments with universal basic income (UBI) have yielded mostly positive results across states, reinforcing calls for social policy.

Key Highlights:

- UBI is a social welfare policy in which all beneficiaries receive a guaranteed income in the form of an unconditional transfer payment on a regular basis.
- The goal of UBI is to ensure that every citizen has a minimum level of income to cover basic needs like food, shelter, and healthcare, thereby reducing poverty and economic inequality.
- It is designed to simplify social welfare systems by replacing or consolidating various targeted social programs, which can be complex and administratively burdensome.

- A UBI support programme has five accepted principles: unconditional support; periodic payments as opposed to lump sum transfers; direct cash transfer instead of coupons or cash equivalents; and individual beneficiaries rather than households.

India-Middle East-Europe Economic Corridor

- **Context:** The US President has said that the ambitious India-Middle East-Europe Economic Corridor is one of the reasons for Hamas terrorist attack on Israel.

Key Highlights:

- The corridor will encourage and provide impetus to economic development through enhanced connectivity and economic integration between Asia, West Asia, the Middle East and Europe.
- During the Delhi G20 Summit, India, USA, UAE, Saudi Arabia, France, Germany, Italy and the European Union signed a Memorandum of Understanding (MoU) to establish the India-Middle East-Europe Economic Corridor.
- The India-Middle East-Europe Economic Corridor will consist of two separate corridors, the East corridor connecting India to West Asia/Middle East and the Northern corridor connecting West Asia/Middle East to Europe.
- The project would involve the building of a railway line across the Arabian Peninsula through the United Arab Emirates and Saudi Arabia and develop shipping connectivity to India and Europe on either end of this corridor.
- The corridor could be further developed to transport energy through pipelines and data through an optical fiber link.

29th OCTOBER, 2023

Ghost Particles or Neutrinos

- **Context:** China is building the world's largest telescope called "Trident" below the South China

Sea. The job of the telescope is to detect "ghost particles" also known as neutrinos.

Key Highlights:

- Neutrinos are tiny subatomic particles. They are often called 'ghost particles' because they barely interact with anything else.
- Neutrinos do not carry an electric charge which means they are not affected by electromagnetic forces. This allows them to pass through matter including most atoms, with minimal interaction.
- Neutrinos have a mass much smaller than other fundamental particles like electrons or quarks.
- Neutrinos' weak charge have made them difficult to observe. They can only be seen when they interact with other particles.
- Neutrinos will help solve a number of scientific mysteries like the origin of the cosmic rays which are known to contain neutrinos.
- Neutrinos are essential for understanding the origins of our universe

Dark Pattern practices

- **Context:** The Consumer Affairs Secretary has said that the dark patterns practices carried out by airlines and travel portals can be called a "cybercrime."

Key Highlights:

- A dark pattern refers to a design or user interface technique that is intentionally created to manipulate or deceive users into making certain choices or taking specific actions that may not be in their best interest.
- It is a deceptive practice employed to influence user behavior in a way that benefits the company implementing it.
- Airlines uses false urgency to make customers feel they must pay an extra fee for a seat as all free seats appear unavailable.
- Even if there are four or five available free seats, they are displayed at the bottom of the page making them harder to find.

- Passengers can click “skip” at the end of the seat selection but they aren’t clearly told that they’ll be automatically assigned a free seat if they don’t pay the extra fee.
- It encourages passengers to buy travel insurance by using phrases like “I will risk my trip” if they decide not to make the purchase.
- This creates a sense of fear suggesting that not getting the insurance could be risky or harmful for the trip.

Parliamentary Committee recommendations:

- Airlines must display seat-wise airfares to ensure transparency.
- Directorate General of Civil Aviation (DGCA) should ensure proper implementation of the Aircraft Rules, 1934 to ensure that airlines earn only a reasonable profit while pricing their tickets.
- Effective mechanism should be there to address consumer grievances in a time-bound manner.

30th OCTOBER, 2023

Brazzaville Declaration

- **Context:** A Summit of Three basins is going to be held at Brazzaville, Republic of Congo.

Key Highlights:

- Brazzaville Declaration Signed in 2018 by Democratic Republic of Congo (DRC), the Republic of Congo and Indonesia to protect the Cuvette Centrale region in the Congo Basin, the world’s largest tropical peatlands, from unregulated land use and prevent its drainage and degradation.

Three basins are:

- Congo Basin is the second-largest tropical forest in the world in terms of area. It spans across six countries—Cameroon, Central African Republic, Democratic Republic of the Congo, Republic of the Congo, Equatorial Guinea and Gabon.

- Amazon basin is the largest tropical forest on the planet.

It extends over 9 countries in South America: Brazil, Peru, Ecuador, Colombia, Venezuela, Bolivia, French Guiana, Suriname and the Republic of Guyana.

- Borneo-Mekong-Southeast Asia Basin is the world’s third largest carbon sink. It is composed of two sub-regions, the island of Borneo and the Mekong River.

The Mekong River is one of the largest rivers in the world. It crosses six countries: China, Myanmar, Thailand, Laos, Cambodia and Vietnam. Borneo is the fourth largest island in the world. It is divided between Brunei, Malaysia and Indonesia.

Manual Scavenging

- **Context:** The Supreme Court has directed the Union and state governments to ensure the complete eradication of manual scavenging.

Key Highlights:

- Manual scavenging refers to the practice of manually cleaning, handling, and disposing of human excreta and other waste materials from dry latrines, open drains and sewers.
- In India, manual scavenging has been officially banned since 1993.
- Over the past five years, 347 people have lost their lives while cleaning sewers and septic tanks in India. Uttar Pradesh, Tamil Nadu and Delhi accounted for 40% of these deaths.

Directives issued by the Supreme Court on Manual Scavenging:

- Provide compensation of Rs 30 lakh to the families of individuals who lose their lives while cleaning sewers.
- Those who suffer permanent disabilities during such work should receive a minimum compensation of Rs 20 lakh and
- Those with other disabilities caused by sewer cleaning should receive Rs 10 lakh as compensation.

31st OCTOBER, 2023

Exercise KAZIND-2023

- **Context:** Indian Army and Indian Air Force contingent departed for Kazakhstan to take part in the 7th edition of Joint Military 'Exercise KAZIND-2023'.

Key Highlights:

- The Joint Exercise between India and Kazakhstan was instituted as 'Exercise PRABAL DOSTYK' in 2016. After the second edition, the Exercise was upgraded to a company-level exercise and renamed as 'Exercise KAZIND'.
- The Exercise has been further upgraded as a Bi-service Exercise this year by including the Air Force component.
- In this edition of the Exercise, both sides will practice conduct of Counter Terrorism operations in a sub-conventional environment under United Nations mandate.
- It will provide an opportunity for both sides to gain insight into the tactics, battle drills, and procedures of each other, which is a prerequisite while operating under the ambit of the United Nations.

Developed Countries Emission Trajectories

- **Context:** A Delhi-based think tank Council for Energy Environment and Water (CEEW) has published a study titled "Revealing Developed Countries' Emission Trajectories".

Key Highlights:

- Between 1990 and 2020, developed countries managed to reduce greenhouse gas emissions by 20% aligning with their collective target.
- However, a substantial part of this reduction occurred due to events like the COVID-19 pandemic in 2020 and changes during the mid-1990s when former Soviet countries transitioned to market economies.
- Developed countries are responsible for three-fourths of current carbon emissions.

- Climate targets for 2030 also known as NDCs for developed countries represent a 36 per cent reduction in emissions compared to 2019.
- This falls short of the 43 per cent reduction needed on the global average to limit warming to 1.5°C.
- Moreover, developed countries are projected to emit 38% more carbon by 2030 than their commitments suggest.
- Around 83% of this overshoot in emissions will be caused by the U.S, Russia and European Union.
- Only two Parties to the Paris Agreement, Belarus and Norway are projected to meet their 2030 NDCs.
- To achieve net-zero emissions by 2050, developed nations aim to significantly ramp up emission reductions post-2030.
- However, even if they achieve net-zero by 2050, they are projected to consume a significant portion, around 40-50%, of the remaining carbon budget.

5G and 6G Technology

- **Context:** The Department of Science and Technology (DST) Secretary has said that India has the potential to lead in 6G standardization by leveraging its indigenous 5G technology.

Key Highlights:

- 5G provides speeds up to several gigabits per second (Gbps) whereas 6G expected to offer speed in the terabits per second (Tbps) range.
- 5G utilizes technologies like massive MIMO, beamforming and network slicing whereas 6G predicted to integrate technologies such as AI-driven networks, advanced beamforming and quantum cryptography.
- 5G enables advancements in Internet of Things (IoT), autonomous vehicles, AR/VR and smart cities whereas 6G expected to support more advanced applications such as holographic communications, real-time AI and more sophisticated IoT.
- 5G currently being deployed globally, with ongoing expansion and 6G expected to start commercial deployment around the late 2020s to 2030 and beyond.