DAILY CURRENT AFFAIRS ANALYSIS

18 MAY 2024

1 - India's Call for Reforming the Security Council:

GS II

International Relations

- **Context:**

- Participating in the Intergovernmental Negotiations on Security Council Reform, India has presented a detailed model on behalf of the G4 nations for United Nations Security Council Reform.

- The model includes new permanent members elected democratically by the UN General Assembly and shows flexibility on the veto issue.
- The G4 (Brazil, Germany, India and Japan) was created in 2004 and has been promoting Security Council reform.

- **What are the Key Features of the G4 Proposed Model?**

- Addressing Under-representation: The model highlights the "glaring under-representation and un-representation" of key regions in the Council's current composition, which hampers its legitimacy and effectiveness.
- Membership Expansion: The G4 model advocates for increasing the Security Council's membership from the current 15 to 25-26 members.
- This expansion includes adding 6 permanent and 4 or 5 non-permanent members.
- Two new permanent members each are proposed from African states and Asia Pacific states, one from Latin American and Caribbean states, and one from Western European and Other states.
- Flexibility on Veto: In a departure from the existing framework where only the five permanent members hold veto powers, the G4 model offers flexibility on the veto issue.
- New permanent members would refrain from exercising the veto until a decision on the matter is taken during a review process, demonstrating a willingness to engage in constructive negotiations.
- Democratic and Inclusive Election: The proposal emphasizes that the decision on which member states will occupy the new permanent seats will be made through a democratic and inclusive election by the UN General Assembly.

- **What is the United Nations Security Council?**

- The United Nations Security Council, established under the UN Charter in 1945, constitutes one of the UN's six principal organs.
- Comprising 15 members, it includes 5 permanent members (P5) and 10 non-permanent members elected for two-year terms.

- The permanent members are the United States, Russian Federation, France, China, and the United Kingdom.
- According to Oppenheim's International Law : United Nations, "Permanent membership in the Security Council was granted to five states based on their importance in the aftermath of World War II."
- India's participation in the Security Council has been as a non-permanent member during the periods of 1950-51, 1967-68, 1972-73, 1977-78, 1984-85, 1991-92, 2011-12, and 2021-22.

- **Why does the UN Security Council Need to be Reformed?**

- Representation and Legitimacy: The Security Council plays a crucial role in peacekeeping and conflict resolution, with binding decisions that impact all member states.
- To ensure these decisions are respected and implemented universally, the Council must possess the necessary authority and legitimacy, which requires representation reflecting the current global landscape.
- Outdated Composition: The current composition of the Security Council, based on the geopolitical situation of 1945 and expanded marginally in 1963/65, no longer accurately represents the world stage.
- With 142 new countries joining the United Nations since its inception, regions like Africa, Asia, Latin America, and the Caribbean lack adequate representation, necessitating adjustments to the Council's composition.
- Recognition of Contributions: The UN Charter acknowledges that countries making substantial contributions to the organisation should have a role in the Security Council.
- This recognition underscores the candidacy of nations like India, Germany and Japan for new permanent seats, reflecting their meaningful contributions to the UN's mission.
- Risk of Alternative Decision-Making Forums: Without reform, there's a risk that decision-making processes could shift to alternative forums, potentially diluting the Security Council's effectiveness.
- Such competition for influence is counterproductive and not in the collective interest of member states.
- Misuse of Veto Power: The utilisation of veto power has consistently faced criticism from numerous experts and the majority of states, labelling it as a "self-selected group of privileged nations" that lacks democratic principles and hinders the Council's ability to take essential decisions if it conflicts with the interests of any of the P-5 members.
- In today's global security landscape, relying on exclusive decision-making frameworks is deemed unsuitable.

- **What is the Procedure of UN Security Council Reforms?**

- UN Security Council reform requires an amendment to the Charter of the United Nations. The relevant procedure as set out in Article 108 involves a two-stage process:

- First Stage: The General Assembly, where each of the 193 member states holds one vote, must endorse the reform with a two-thirds majority, equivalent to at least 128 states.
- This stage does not grant the right of veto, as per Article 27 of the Charter.
- Second Stage: Upon approval in the first stage, the United Nations Charter, considered an international treaty, undergoes amendment.
- This amended Charter requires ratification by at least two-thirds of the member states, including all five permanent Security Council members, adhering to their respective national procedures.
- In this stage, the ratification process can be influenced by the parliaments of the permanent members, potentially affecting the entry into force of the amended Charter.

- A negative vote from permanent members in the General Assembly does not prevent them from later ratifying the amended Charter.

- For instance, during the 1963 vote to enlarge the Security Council, only one permanent member voted in favour.
- However, within 18 months by 1965, all five permanent members had ratified the amended Charter.

- **Way Forward:**

- Engagement and Consensus Building: Fostering inclusive dialogues and consultations among member states, particularly focusing on the perspectives of underrepresented regions like Africa, Asia, Latin America, and the Caribbean.
- Seek common ground and build consensus on the principles and objectives of Security Council reform, emphasising the importance of representation, legitimacy, and effectiveness.
- Amending the UN Charter: Encourage cooperation and coordination among all stakeholders, including the five permanent members, to facilitate the ratification process and ensure the amended Charter reflects contemporary global realities.
- Addressing Veto Power: Exploring avenues for reforming the use of veto power within the Security Council, considering proposals that balance the need for decisive action with concerns about fairness and inclusivity.
- Encouraging transparency and accountability in the exercise of veto power, ensuring that it aligns with the Council's mandate to maintain international peace and security.
- Strengthening Council Effectiveness: Enhancing the Council's capacity to respond swiftly and effectively to emerging global challenges, including conflicts, humanitarian crises, and threats to international security.
- Promoting cooperation and coordination with other UN bodies, regional organisations, and relevant stakeholders to leverage expertise and resources for peacekeeping and conflict resolution efforts.

Source → The Hindu

2 - Global Methane Tracker 2024:

GS III

Environmental Conservation

- **Context:**

- The International Energy Agency's Global Methane Tracker 2024 indicates that methane emissions from fuel usage in 2023 were nearly at their highest level on record, representing a slight increase compared to 2022.

- **What are the Major Highlights of Global Methane Tracker 2024?**

- Methane Emissions Overview: In 2023, methane emissions from fossil fuels totaled close to 120 million tonnes (Mt).
- Bioenergy (largely from biomass use) contributed a further 10 Mt methane emissions. This level has stayed constant since 2019.
- Rise of Major Methane Emissions Events: Major methane emissions events increased by over 50% in 2023 compared to 2022.
- These events included more than 5 million metric tons of methane emissions from significant fossil fuel leaks globally.
- One prominent incident was a major well blowout in Kazakhstan that lasted over 200 days.
- Top Emitting Countries: Nearly 70% of methane emissions from fossil fuels come from the top 10 emitting countries.
- The United States is the largest emitter of methane from oil and gas operations, closely followed by Russia.
- China is the highest emitter of methane in the coal sector.
- Importance of Cutting Methane Emissions: Cutting methane emissions from fossil fuels by 75% by 2030 is crucial for limiting global warming to 1.5 °C.
- The IEA estimated that this goal would require about USD 170 billion in spending. This is less than 5% of the income generated by the fossil fuel industry in 2023.
- Around 40% of emissions from fossil fuels in 2023 could have been avoided at no net cost.

- **What is Methane?**

- About: Methane is the simplest hydrocarbon, consisting of one carbon atom and four hydrogen atoms (CH_4).
- It is the primary component of natural gas, possessing key characteristics:
- Odourless, colourless, and tasteless gas.
- Lighter than air.

- Burns with a blue flame in complete combustion, yielding carbon dioxide (CO_2) and water (H_2O) in the presence of oxygen.
- Contribution to Global Warming: Methane ranks as the second most important greenhouse gas (GHG) after carbon dioxide (CO_2).
- Its 20-year global warming potential (GWP) is 84, indicating that it traps 84 times more heat per mass unit than CO_2 over a 20-year period, making it a potent GHG.
- Despite its potency, methane has a shorter atmospheric lifetime compared to CO_2, classifying it as a short-lived GHG.
- It is a significant contributor to global warming, accounting for about 30% of the rise in global temperatures since the preindustrial era.
- Methane also contributes to the formation of ground-level ozone.

- **Major Sources of Methane Emission:**

- **Natural Sources:**

- Wetlands, both natural and human-made, are significant sources of methane emissions due to anaerobic decomposition of organic matter.

- **Agricultural Activities:**

- Growing paddy fields release methane due to anaerobic conditions in flooded rice paddies.
- Excreta from cattle and other livestock undergo enteric fermentation, producing methane as a byproduct.

- **Combustion and Industrial Processes:**

- Burning of fossil fuels, including oil and natural gas, releases methane emissions.
- Biomass burning, such as wood and agricultural residues, also contributes to methane levels.
- Industrial activities like landfills and wastewater treatment plants generate methane during organic waste decomposition in anaerobic environments.
- Fertiliser factories and other industrial processes can also release methane during production and transportation.

- **Initiatives to Tackle Methane Emissions:**

- **India:**

- Harit Dhara (HD)
- BS VI Emission Norms.
- National Action Plan on Climate Change (NAPCC)

- **Global:**

- Methane Alert and Response System (MARS).
- Global Methane Pledge
- Global Methane Initiative (GMI)
- MethaneSAT

- **What is the Global Methane Pledge?**

- About: The Global Methane Pledge was launched at UNFCCC COP26 in November 2021 to catalyse action to reduce methane emissions. Led by the US and the EU, the Pledge now has 111 country participants who together are responsible for 45% of global human-caused methane emissions.
- It aims for a 30% reduction in global methane emissions from 2020 levels by 2030.
- India has opted not to sign the Global Methane Pledge.

- **Key Reasons for this Decision Include:**

- India contends that the primary contributor to climate change remains CO2, with a long lifespan of 100-1000 years.
- The Pledge shifts focus to methane reduction, which has a shorter lifespan of just 12 years, thus altering the burden of CO2 reduction.
- Methane emissions in India primarily stem from agricultural activities like enteric fermentation and paddy cultivation, affecting small, marginal, and medium farmers whose livelihoods would be jeopardised by the Pledge.
- This contrasts with industrial agriculture prevalent in developed countries.
- Also, given India's significant role as a rice producer and exporter, signing the Pledge could affect trade and economic prospects.
- India hosts the world's largest cattle population, supporting the livelihoods of many.
- However, Indian livestock's contribution to global enteric methane is minimal due to their diet rich in agricultural by-products and unconventional feed materials.

- **What is the International Energy Agency?**

- IEA is an independent intergovernmental organisation founded in 1974 in Paris, France.
- Its primary emphasis isblications are the World Energy Outlook Report, World Energy Investment Report, and India Energy Outlook Report.
- India became a member of the IEA in 2017.

- **Way Forward:**

- Improved Agricultural Practices: Encouraging and adopting sustainable agricultural practices such as precision farming, conservation tillage, and integrated crop-livestock systems can help reduce methane emissions from agricultural activities.

- Methane-Capturing Technologies: Implementing methane capture technologies in livestock operations and landfills can capture methane before it is released into the atmosphere, converting it into usable energy or other products.
- Rice Cultivation Techniques: Promoting practices like System of Rice Intensification (SRI) and Direct Seeded Rice (DSR) mentioned earlier can significantly reduce methane emissions from rice paddies.
- Biogas Production: Encouraging the production and use of biogas from organic waste can provide a renewable energy source while mitigating methane emissions from waste decomposition.

Source → The Hindu

3 - Bond Yield:

GS III

Indian Economy

- **Context:**

- Recently, the State governments have mobilised a record Rs 50,206 crore through the auction of State Development Loan (SDL) Bonds, marking the largest such weekly borrowing ever.

- The funds raised far exceeded the indicative borrowing target of Rs 27,810 crore set for the period, as per Reserve Bank of India (RBI) data. This indicates robust demand for state government securities in the financial markets.
- SDLs are the part of Government Securities (G-Sec), where State Governments raise loans from the market. SDLs are dated securities issued through normal auctions similar to the auctions conducted for dated securities issued by the Central Government.

- **What are Bonds?**

- **About:**

- A bond is an instrument to borrow money. It is like an IOU (I owe you).
- An IOU is a written acknowledgement of debt that one party owes another. IOUs are less formal and legally binding than promissory notes.
- A bond could be floated/issued by a country's government or by a company to raise funds.
- Since Government Bonds (referred to as G-secs in India, Treasury in the US, and Gilts in the UK) come with the sovereign's guarantee, they are considered one of the safest investments.

- **Types of G-Secs:**

- Treasury Bills (T-bills): Treasury bills are zero coupon securities and pay no interest. Instead, they are issued at a discount and redeemed at the face value at maturity.
- Cash Management Bills (CMBs): In 2010, the Government of India, in consultation with RBI introduced a new short-term instrument, known as CMBs, to meet the temporary mismatches in the cash flow of the Government of India.
- The CMBs have the generic character of T-bills but are issued for maturities of less than 91 days.
- Dated G-Secs: Dated G-Secs are securities that carry a fixed or floating coupon rate (interest rate) which is paid on the face value, on a half-yearly basis. Generally, the tenor of dated securities ranges from 5 years to 40 years.
- State Development Loans (SDLs): State Governments also raise loans from the market which are called SDLs. SDLs are dated securities issued through normal auctions similar to the auctions conducted for dated securities issued by the Central Government.

- **Bond Yields:**

- The yield of a bond is the effective rate of return that it earns. But the rate of return is not fixed — it changes with the price of the bond.
- But to understand that, one must first understand how bonds are structured.
- Every bond has a face value and a coupon payment. There is also the price of the bond, which may or may not be equal to the face value of the bond.
- In addition to the face value and coupon payment, bonds also have a coupon rate.
- The coupon rate is the fixed annual interest rate expressed as a percentage of the bond's face value.
- For Instance, the face value of a 10-year G-sec is Rs 100, and its coupon payment is Rs 5, and coupon rate is 5%.
- Buyers of this bond will give the government Rs 100 (the face value); in return, the government will pay them Rs 5 (the coupon payment) every year for the next 10 years, and will pay back their Rs 100 at the end of the tenure.
- In this case, the bond’s yield, or effective rate of interest, is 5%. The yield is the investor’s reward for parting with Rs 100 today, but for staying without it for 10 years.

- **Yield Curve:**

- The Yield Curve is a graphical representation of the interest rates on debt for a range of maturities.
- It shows the yield an investor is expecting to earn if he lends his money for a given period of time.
- A fixed income Analyst may use the yield curve as a leading economic indicator, especially when it shifts to an inverted shape, which signals an economic downturn, as long-term returns are lower than short-term returns.

- **How Does RBI Manage Bond Yield?**

- The Reserve Bank of India (RBI) employs Open Market Operations (OMOs) as a pivotal tool to manage bond yields and regulate monetary conditions within the economy. Through OMOs, the RBI strategically sells or purchases Government Securities (G-secs) in the open market.
- When the RBI aims to curb excess liquidity and temper inflationary pressures, it sells G-secs, effectively absorbing liquidity from the market. Conversely, to stimulate economic activity and bolster liquidity, the RBI buys back G-secs, injecting funds into the system.
- When the RBI sells G-secs, it puts upward pressure on bond yields, making borrowing costlier and thereby curbing excessive borrowing and spending. Conversely, purchasing G-secs tends to drive bond prices higher, pushing yields lower, which can encourage borrowing and investment.
- In conjunction with OMOs, the RBI employs a suite of monetary policy tools including the repo rate, cash reserve ratio, and statutory liquidity ratio.
- By strategically deploying these tools, the RBI orchestrates a comprehensive approach to managing bond yields and fostering stable economic conditions conducive to growth and stability.

- **What are the Factors Influencing the Yield Curve?**

- **Market Demand and Bond Prices:**

- Imagine there's only one bond available, and two buyers want to buy it. They might bid against each other, driving the bond's price up.
- Even though the bond's face value remains the same, say Rs 100, if it's sold for Rs 110, the yield decreases because the coupon payment remains constant at, say, Rs 5. So, the yield is effectively calculated based on the price paid for the bond.

- **Alignment with Economy's Interest Rate:**

- If the interest rate in the economy is different from the bond's initial coupon payment, market forces adjust the bond's yield to align with the prevailing interest rate.
- For example, if the economy's interest rate is 4% and a bond offers a 5% yield, many investors will rush to buy it for a higher return.
- This demand drives up the bond's price until its yield matches the economy's interest rate.
- Conversely, if the economy's interest rate is higher than the bond's yield, the bond's price decreases until its yield matches the prevailing rate.
- Analogy: If the economy's interest rate is higher than the bond's yield, it's like having a heavier weight on the side of the economy's interest rate. This causes the seesaw to tilt towards the economy's interest rate side, indicating that the bond's yield is lower relative to the interest rate.
- Conversely, if the bond's yield is higher than the economy's interest rate, it's like having a heavier weight on the side of the bond's yield. This tilts the seesaw towards the bond's yield side, indicating that the bond's yield is higher relative to the interest rate

Source → The Hindu

4 - Global E-waste Monitor 2024:

GS III

Environmental Conservation

- **Context:**

- Recently, the United Nations Institute for Training and Research (UNITAR) has released the Global E-waste Monitor 2024, which states that the world's generation of electronic waste is rising five times faster than documented e-waste recycling.

- The UNITAR is a training arm of the United Nations that helps governments, organisations, and individuals overcome global challenges.
- UNITAR offers learning events and solutions, including workshops, seminars, conferences, public lectures, and online courses. It also provides organisational advisory services, conference and retreat facilitation, and online learning solutions.

- **What are the Key Highlights of the Global E-waste Monitor 2024 Report?**

- **E-waste Generation Trends:**

- There is a significant increase in global e-waste generation, rising from 34 billion (bn) kg in 2010 to 62 bn kg in 2022.
- This trend is projected to continue, reaching 82 bn kg by 2030.
- Of this 62 bn kg, only 13.8 bn kg is documented as 'formally collected and recycled in an environmentally sound manner'.
- 62 bn kg of e-waste includes 31 bn kg of metals, 17 bn kg of plastics and 14 bn kg of other materials (minerals, glass, composite materials, etc.)

- **Drivers of E-waste Generation:**

- Factors driving the increase in e-waste generation include technological progress, higher consumption rates, limited repair options, short product life cycles, growing electronification, and inadequate e-waste management infrastructure.

- **Informal Recycling Sector:**

- A significant portion of e-waste (both in high- and upper-middle-income countries as well as low- and lower-middle-income countries) is handled by the informal sector due to inadequate formal e-waste management infrastructure.

- **Environmental and Health Impacts:**

- The improper management of e-waste, including informal recycling practices, leads to the release of hazardous substances such as mercury and plastics containing brominated flame retardants into the environment, posing direct and severe impacts on both the environment and public health.
- A brominated flame retardant is a chemical compound containing bromine that is added to materials to inhibit or suppress the ignition and spread of fires.
- They work by interfering with the combustion process, reducing the flammability of materials and slowing down the rate at which flames spread.
- A whopping 58,000 kg of mercury and 45 million kg of plastics containing brominated flame retardants are released into the environment every year.

- **Regional Disparities:**

- Europe has the highest rate of documented formal collection and recycling of e-waste (42.8%), while Africa struggles with low recycling rates (<1%) despite generating lower amounts of e-waste.
- Asia, including India, generates a significant portion of global e-waste but has made limited advances in e-waste management.
- Countries in Asia generate almost half of the world's e-waste (30 bn kg) but relatively few of them have enacted legislation or established clear e-waste collection targets.

- **Per Capita E-waste Generation and Recycling Rates:**

- Europe (17.6 kg), Oceania (16.1 kg) and the Americas (14.1 kg) generated the highest amount of e-waste per capita in 2022.
- They also had the highest documented per capita collection and recycling rates (7.53 kg per capita in Europe, 6.66 kg per capita in Oceania and 4.2 kg per capita in the Americas).
- This was because their collection and recycling infrastructure was the most advanced.

- **Recycling Rates by Equipment Type:**

- Collection and recycling rates are highest for heavier and bulkier equipment like temperature exchange equipment and screens and monitors.
- Thus, while toys, microwave ovens, vacuum cleaners and e-cigarettes comprise a third (20 bn kg) of the world's e-waste, recycling rates for them are very low 12% globally.

- Small IT and telecommunication equipment — laptops, mobile phones, GPS devices and routers — constitute 5 bn kg of e-waste.
- But just 22% of this is documented as formally collected and recycled.

- **Policy Adoption:**

- 81 countries have adopted e-waste policy, legislation or regulation.
- Sixty-seven countries have legal provisions on Extended Producer Responsibility (EPR) for e-waste.
- Another 46 have provisions on e-waste collection rate targets. Finally, 36 countries have provisions on e-waste recycling rate targets.

- **What is an e-Waste?**

- Electronic waste (e-waste), is a generic term used to describe all types of old, end-of-life or discarded electrical and electronic equipment, such as household appliances, office information and communications equipment etc.
- E-waste contains numerous toxic chemicals including metals such as lead, cadmium, mercury, and nickel.
- India currently ranks third among the largest generators of e-waste globally, behind only China and the US.
- The volume of e-waste in India has witnessed a significant surge to 1.6 million tonnes in 2021-22.
- The 65 cities in India generate more than 60% of the total generated e-waste, whereas 10 states generate 70% of the total e-waste.

Source → The Hindu