DAILY CURRENT AFFAIRS ANALYSIS

14 SEPTEMBER 2023

1 – About India-Middle East-Europe mega economic corridor:

GS II

International Issues

- **Context:**

- Launch of the megaeconomic corridor between India, the Middle East, and Europe was declared by the Indian Prime Minister.

- **Regarding the project:**

- The US and India are co-leading the plan, which covers connectivity and infrastructure running through Saudi Arabia, the UAE, Jordan, Israel, and the EU as well as through India.
- The Partnership for Global Infrastructure Investment (PGII) includes the rail and shipping route.
- PGII is a joint initiative of the G7 countries to finance infrastructure improvements in underdeveloped countries.
- As the bloc's response to China's Belt and Road Initiative, PGII is known as.

- **Aim:**

- The project's goal is to increase trade, notably trade in energy products, among the participating nations.

- **What will be covered by the project:**

- **The corridor will consist of:**

- a hydrogen pipeline, a rail link, an energy cable, and a high-speed data cable.

- **The IMEE EC will have two distinct corridors:**

- East Corridor linking India to Middle East and West Asia
- a northern corridor linking Europe with West Asia/the Middle East.
- It will contain a rail line that will support the existing multi-modal transportation routes with a dependable and affordable cross-border ship-to-rail transit network.

- **Project's requirement:**

- Through a greater flow of energy and digital communications, it would promote prosperity among the participating nations.
- The project would address the issue of lower- and middle-income countries' lack of the infrastructure necessary for growth.
- It might assist in bringing down the level of unrest and unease emanating from the Middle East.

- **About Partnership for Global Infrastructure Investment (PGII):**

- The PGII was formally introduced in 2022 during the G7 conference in Germany as a joint initiative to aid in funding infrastructure projects in underdeveloped countries through public and private investments.
- It was offered as a substitute for the infrastructure initiatives being sponsored and carried out globally by China as part of the Belt and Road Initiative (BRI).

- **Need for a substitute:**

- **Operation of BRI:**

- China launched the Belt and Road Initiative in 2013, which aspires to reopen the historic trade routes that once connected East Asia and Rome, Europe, to China.
- As a result, the Chinese government assisted in lending money to numerous nations for infrastructure projects.
- Chinese businesses frequently received contracts to complete the job.
- This aided China in leaving its mark on the world stage.

- **BRI criticism:**

- China has come under fire for giving nations with unrepayable debts unsustainable debts.
- A 2019 World Bank analysis states that of the 43 corridor economies, 12 could experience unsustainable debt, which could force the transfer of public assets to foreign firms or China itself.
- India opposed the BRI because it contained the China-Pakistan Economic Corridor, which ran across Pakistan-occupied Kashmir to connect Kashgar in China with the Gwadar port in Pakistan.

- **The project's importance to India:**

- By integrating India's hydrocarbon value chain and creating an innovation corridor for green energy and innovative technology manufacturing value chains, this new connectivity architecture for India may lead to the creation of a different trans-regional commercial transportation route.

- **Belt and Road Initiative of China:**

- The BRI is a large-scale initiative to create two new trade routes that will link China to the rest of the globe.
- It aims to enlarge China's interconnected market, strengthen its political and economic influence, and foster the circumstances necessary for the country to develop a high-tech economy.

- **"The Belt":**

- The Silk Road Economic 'Belt' element refers to ideas for a resurrected network of historic overland trade routes linking Europe and Asia, which would be mostly constructed with Chinese expertise.
- **The Route:**

- A maritime silk road connecting China, Southeast Asia, Africa, and Europe was proposed by China in 2014 along with plans to build new sea commerce infrastructure.
- This would be a lengthier route that would pass through Southeast Asia and the Indian Ocean without crossing the Malacca Strait and would include fueling stations, ports, bridges, industries, and infrastructure.

- Through the China Pakistan Economic Corridor project, Pakistan is regarded as maybe the most important partner nation in this effort.

- ***Source → The Hindu***

2 - Quote: The heaviest penalty for declining to rule is to be ruled by someone inferior:

GS II

Social Issues

- **Context:**

- In The Republic, Plato uses dialogue to discuss themes such as justice, beauty, and the ideal form of government.
- He was a student of the philosopher Socrates, and in the book, he used imaginary talks between characters, including Socrates, to illustrate his points.

- One of his points is that in a society, only particular people ought to carry out particular jobs.
- He criticises democracy (or the limited form that was used at the time in Greece).
- Plato is concerned of the decision-making capacity of the average person and suggests that only educated individuals known as "philosopher-kings" should be permitted to rule.
- In addition to being educated in terms of statecraft and governance, they must also be morally upright.

- **Message of the quotation:**

- Both the arts and government are meant to serve the interests of others.
- No one wants to take on the reformation of issues that are not their business without compensation, which is why no one wants to be in a position of power.
- Therefore, one of three forms of payment—cash, honour, or a penalty for refusing—must be provided in order for rulers to be willing to rule.
- The pursuit of wealth and prestige does not motivate good guys.
- As a result, a penalty must be used as leverage instead.
- They must be coerced into serving when it is necessary because they are afraid of being punished or having someone else govern in their place.
- Because "inferior men" will be forced to rule if they don't.
- Therefore, the desire to serve others through public service does not stem from a desire to uphold one's honour or gain financial gain, but rather from a concern that others would not carry out their obligations.

- **What may be inferred about public life and duty from this quote?**

- The notion of philosopher-kings in Plato has come under fire for having autocratic inclinations and for only permitting select people to participate in governance based on constrained, ambiguous notions of what is "good."
- However, there is some truth to the idea that morally upright people are unlikely to act for just money gain.
- Additionally, according to a number of religious traditions, being good entails acting in another person's best interests rather than your own.
- One's own objectives should not be used as a guide while joining public institutions.
- We should consider how we can help others and what might happen if someone else steps in our place—someone who might not have the same good intentions—instead of focusing on what might be in it for ourselves.
- Plato's appeal for active participation in such a situation can point the way.
- Regardless of how likely one's objectives are to be realised, one should nevertheless participate in public life for the benefit of society in order to avoid giving the upper hand to malign, ill-intentioned individuals.

- ***Source → The Hindu***

3 – About Global Biofuels Alliance:

GS II

International Issues

- **Context:**

- In conjunction with the G-20 Summit, India officially established the Global Biofuels Alliance.

- **The Global Biofuels Alliance's background:**

- Along with India, the initial members also include South Africa, the UAE, Mauritius, Argentina, Bangladesh, Brazil, and Italy.
- The United States, Canada, and Singapore all have observer status.
- By enabling trading in biofuels made from sources such as plant and animal waste, the Global Biofuels Alliance (GBA) will contribute to accelerating global efforts to reach net-zero emissions targets.
- The alliance aims to promote collaboration and increase the use of sustainable biofuels in a variety of industries, including transportation.

- **Its primary emphasis is on:**

- expanding markets,
- promoting commerce,
- promoting commerce in biofuels globally,
- Creating concrete policy, sharing lessons, and
- supplying technical assistance to national biofuel efforts around the world.

- The Global Bioenergy Partnership, the Mission Innovation Bioenergy initiatives, and the Clean Energy Ministerial Biofuture Platform are only a few of the important, currently operating regional and international organisations that it will cooperate with and supplement.
- The GBA would be comparable to the International Solar Alliance, which was launched in 2015 by New Delhi and Paris with the goal of making solar energy accessible to everyone.

- **Defining biofuel:**

- Any fuel that is derived from biomass or organic matter is referred to as a biofuel.
- Biomass is a sustainable energy source that is used to create biofuel.
- It can be created quickly from biological materials and can take the form of a solid, liquid, or gas.
- This contains any kind of plant or algal matter, even wood, in addition to animal faeces.
- These fuels are regarded as renewable sources of energy since the cycle of life continually replenishes them organically.

- **Origins of biofuel:**

- animal tallow
- Sugarcane
- Rice
- Beetroot
- Timber chips
- rapeseed oil
- grain oil
- oil from palm
- Cannabis oil
- safflower oil
- safflower oil

- **Various Biofuels:**

- Biodiesel
- Ethanol
- The method by which they are created is the main distinction between the two biofuels.
- Animal fats or vegetable oils are trans-esterified to produce biodiesel.
- Most ethanol is produced by performing certain fermentation processes using plant-based substrates.

- **Relevance to India:**

- India, which imports more than 85% of its crude oil requirements, is progressively increasing its capacity to create fuel from waste materials like municipal solid waste, plant waste, and crop stubble.
- India, the third-largest consumer and importer of oil in the world, continues to struggle with the mounting cost of its oil imports.

- The nation's economic stability and fiscal health are significantly at stake as a result of this financial strain.
- The GBA offers a viable answer by encouraging the use of biofuels.
- India may lessen its reliance on pricey oil imports by diversifying its energy sources.
- The GBA may significantly lessen the financial burden caused by oil imports through technology transfer and encouragement for indigenous biofuel production.

- **Utilisation and accessibility:**

- Biofuels have less geographical restrictions and are easier to obtain than other alternative fuel choices.
- Similar to diesel fuel made from petroleum, biofuel can be stored, burned, and pumped.
- They are easily mixed or utilised in pure form.

- **Low price:**

- When compared to other sources like gas and diesel, biofuels are less expensive.

- **Possibilities for India's ambitious climate policies include:**

- India intends to construct 12 bio-refineries to create fuel from waste materials such as municipal solid waste, plant waste, and crop stubble.
- While constructing up dozens of compressed biogas (CBG) plants, India is on track to raise the amount of ethanol made from sugarcane and agricultural waste that is mixed with petrol to 20% by 2025.
- India aims to achieve carbon neutrality by 2070 and is increasing the use of biofuel in the country's transportation sector.

- **India's current oil consumption or import situation:**

- With a daily consumption of about 5 million barrels, India ranks third in the globe only behind China and the US.
- The country's oil demand is increasing at a rate of 3-4% every year.
- India bought 212.2 million tonnes of crude oil in 2021–22, up from 196.5 million tonnes the year before, according to the Petroleum Planning and Analysis Cell (PPAC).
- In July 2023, India produced 2.50 million metric tonnes (MMT) of crude oil, an increase of 2.1% from the same month the previous year.
- Imports of crude oil dropped by 6.3%.

- **Challenges:**

- Technology secrecy worries could cause reluctance to technology transfer, notably from the US.
- The geopolitical rivalry, notably with China and Russia, might prevent membership growth.
- Other significant obstacles include removing import restrictions on biofuels and creating a sustainable funding system.
- To ensure the alliance's viability, issues like water usage and land allocation must be addressed.

- **Moving ahead:**

- A new era in the search for sustainable energy alternatives has begun with the formation of the Global Biofuels Alliance.
- Nations from all across the world are uniting to support biofuels because they understand their critical role in reducing greenhouse gas emissions and tackling climate change.
- This agreement provides India with an opportunity to become less dependent on expensive oil imports, to improve energy security, and to promote economic growth.
- The GBA can greatly boost India's efforts to reduce its oil import bill through technology transfers and encouragement of domestic biofuel production.
- Furthermore, the business could change and become more competitive and appealing to investors as a result of the cost-effective manufacturing of biofuels.
- Biofuel production may become a competitive replacement for fossil fuels as economies of scale are realised, resulting in a greener and more sustainable energy landscape.
- India's position in the fight against climate change is strengthened by this strategic step, which places India at the forefront of global climate action.
- The GBA can also help India increase its exports of biofuels and increase its energy independence, which will lower its fiscal deficits and inflation.
- Additionally, it has the ability to provide a large number of job opportunities and enhance the financial situation of farmers, particularly sugarcane growers who are suffering from overproduction.

- ***Source → The Hindu***

4 – Details of the G-20 Satellite Mission for Environment and Climate Observation:

GS II

International Issues

- **Context:**

- India made the suggestion that the G-20 launch a satellite mission for monitoring the environment and climate with the intention of assisting the developing world.

- **Key information:**

- All nations, particularly those in the Global South, will be given access to the climate and meteorological data that are gathered as a result.
- India extends an invitation to the G-20 to participate in this project.
- As part of its "neighbourhood first policy," India had already launched a satellite known as Saarc Satellite in 2017 for the benefit of the Saarc nations.
- Its goal was to enlighten its South Asian neighbours about important potential in telemedicine, teleeducation, banking, and television broadcasting.
- The world's most advanced dual-band NASA-ISRO satellite (NISAR), which will image the whole planet in 12 days, has also been developed in collaboration with India and the US.
- For comprehending changes in the Earth's ecosystems, ice mass, vegetation biomass, sea level rise, ground water, and natural hazards including earthquakes, tsunamis, volcanoes, and landslides, it will give geographically and temporally consistent data.

- ***Source → The Hindu***

5 – Details of Electronic Waste:

GS III

Science and Technology

- **Context:**

- A newly published report discussed altering the perception of e-waste management.

- **Key information:**

- Following a government initiative with NITI Aayog to investigate options to harness e-waste, the Indian Cellular and Electronics Association (ICEA) published a paper on "Pathways to Circular Economy in Indian Electronics Sector."
- The research discusses altering the perspective on e-waste management in order to create a system where outdated devices can find new use, either independently or through reusing parts and precious metals in new technology.
- Harnessing e-waste might create an additional $7 billion in market opportunities.

- **Does India handle its e-waste?**

- Like recycling, e-waste management is primarily done informally in India.
- An extremely competitive informal sector manages around 90% of collection and 70% of recycling.
- The E-Waste (Management) Rules, 2022 were notified by the Union Government in an effort to digitise the procedure and increase the visibility of the flow of e-waste throughout the economy.
- In order to remain competitive, the unorganised sector uses a variety of tactics and strategies.
- For instance, "cannibalization," a term used to describe the practise of repair companies purchasing complete gadgets and disassembling them to use as spare components for repairs.
- This benefits the repair shop since occasionally tariffs for finished goods are lower than they are for parts.

- **What a circular economy means:**

- Even though the creation of these products requires the use of limited resources and produces significant emissions, demand for electronics is increasing across all price ranges.
- A circular economy tries to reintegrate these parts into the electronics environment as opposed to merely salvaging them.

- Every material created on Earth serves as a resource, not as garbage.
- A policy push was required to persuade manufacturers to repurpose outdated components.
- China made sure that 5% of its secondary raw materials were used to make new products by 2019, and by 2030, they want to use 35% of them.

- **How is electronic waste recycled?**

- **Public-private collaboration:**

- To split the costs of establishing a massive "reverse supply chain," the ICEA research promotes public-private collaborations.
- The idea of taking user-provided gadgets, wiping them clean of personal information, and then sending them on to be processed further and recycled is an expensive one.

- **A data source:**

- Additionally, it advises starting an auditable database of the data amassed during this process and designing geographic clusters where these devices are grouped together and dispersed.

- **Incentives:**

- One important suggestion is to reward so-called "high yield" recycling facilities.
- Recycling facilities typically lack the necessary equipment to recover all of the potential value from the items they handle, such as the rare earth metals that are present in semiconductors in minute but valuable amounts.
- A programme was started by the IT Ministry to pay for 25% of the capital costs for these facilities.

- **Product lifetime and repair:**

- Another suggestion for regulation is to simply support the right of users to repair products, which will encourage repair and help products survive longer. This will help lessen the environmental impact of electronic trash.

- **Challenges:**

- **Difficult to control informal sector:**

- It is challenging to monitor or hold the sizable informal sector to environmental standards.

- **Consumers who won't share their second hand electronics:**

- For instance, it is estimated that 200 million devices are sitting in consumers' homes because they do not return them for recycling after they are no longer in use.
- Many individuals worry about what might happen to the private information on their gadgets if they recycle them.

- **Massive expenses involved:**

- Large-scale recycling plant construction involves additional expenses beyond only the original capital outlay.
- Material is a significant obstacle to our economic success since businesses lack it.
- These plants' stabilising ingredients are dispersed.

- **Conclusion:**

- It is alluring to turn e-waste into a circular economy, especially considering the erratic supply chains for electronic parts.
- A credible business model, superior material clustering, and capital-intensive extraction of electronics' full value are required.
- Replicating the success of the informal sector in a structured and trustworthy manner is the difficult part.
- It might not be wise to disregard the possibility of 'virgin' components becoming less and less available for too long.
- The nation will eventually need to concentrate on finding ways to offer both items and their component parts a second life.

- ***Source → The Hindu***