DAILY CURRENT AFFAIRS ANALYSIS

15 JULY 2024

1 – Operation Gangotri:

GS II

Government Policies and Interventions:

- **Important information:**

- India made the decision to send its first scientific mission to Antarctica in 1981.
- The 21-person team, lead by marine biologist Dr. S. Z. Qasim, went on a Norwegian rented ship known as the Polar Circle.
- Because the outcome of the historic trip, code-named Operation Gangotri, was uncertain, it was kept secret from the public.

- **About the procedure and results:**

- Concurrent with the finalisation of the United Nations Convention on the Laws of the Sea, India was developing its first Antarctic policies under Indira Gandhi.
- India set out on its first Antarctic mission in December 1981 from the coast of Goa, stopping briefly in Mauritius en route to retrieve supplies and equipment.
- The Norwegian icebreaker ship MV Polar Circle had been rented by India.
- The expedition, comprising 21 scientists, professionals, technicians, and navy officials, completed a successful 21,366-kilometer voyage in 77 days.
- Many people were taken aback by the initial expedition's launch, which was planned and carried out covertly.
- India did not ratify the Antarctic Treaty of 1959 at that time.
- India currently only has "consulting" status.
- Actually, no nation has a permanent status.
- States that either have a territorial claim to Antarctica or retain the right to do so make up the final group of states.
- India did not ratify the Antarctic Treaty until 1983, when it launched its third Antarctic expedition under Indira Gandhi's auspices.
- The nation established Dakshin Gangotri, its first scientific base station in Antarctica, in 1983.

- ***Source → The Hindu***

2 – Global Malaria Report:

GS II

Health related issues:

- **Important information:**

- In 2024, India had a 34% decrease in malaria incidence and a 34% decrease in mortality, with a projected 33.8 lakh cases and 5,511 deaths.
- The WHO South East Asian area as a whole, which is still on track to meet the 2030 goal of a 90% reduction in cases and fatalities, mirrored India's declining trend.
- Between 2000 and 2019, the world's malaria cases decreased from 243 million to 233 million.
- In 2020, there was an 11 million increase in cases, though.
- They saw no change in 2021 and then increased by 5 million to 249 million in 2022.
- Additionally, the number of malaria-related deaths continued to exceed pre-pandemic levels.

- **India's malaria situation:**

- While the number of malaria cases in India has decreased, between 2015 and 2022, there was a fall of 85.1% in malaria cases and an increase of 83.36% in deaths from the disease.
- India is still among the nations with a high infection rate, nevertheless.
- In 2021, India accounted for 1.7% of global malaria cases and 1.7% of all malaria-related deaths.
- The majority of malaria cases are found in the nation's remote and tribal areas.

- **90% of the illness load is accounted for by six states including the tribal regions of Maharashtra and MP:**

- forty percent of Odisha
- Jharkhand (20),
- Chhattisgarh (20),
- Meghalaya
- The state of Andhra Pradesh
- Mizoram (5–7%).

- **Important Lessons from The Report:**

- In India, the number of malaria infections decreased by 30% and the number of deaths decreased by 34% in 2022 compared to the year before.

- In comparison to the previous year, there were 5 million more cases of malaria worldwide in 2022, for a total of 249 million cases.
- The largest number of the 5 million extra cases—2.1 million—came from Pakistan, which experienced flooding in 2022.

- **One percent of all malaria cases worldwide were reported from India:**

- **The reasons behind India's remarkable success:**

- Give priority to offering primary healthcare to the most isolated regions.
- monitoring supported by digital information.
- improved management of severe weather phenomena like cyclones.
- appropriate preventive measures.
- Use of effective tools to keep the mosquito population under check.
- Use point-of-care testing to make a prompt diagnosis.
- Effective handling of malaria cases.

- **About Malaria:**

- Plasmodium parasites, which are often spread by the bite of a female Anopheles mosquito, are the source of the deadly disease malaria.
- Once injected into the host body, these parasites quickly grow in the liver, destroying red blood cells and spreading throughout the system.

- **Malaria types:**

- Ferroplasma falciparum
- Plasmodium vivax (the most prevalent kind)
- malariae Plasmodium
- ovale Plasmodium
- Trypanosoma knowlesi.
- ovale Plasmodium
- P vivax is not a lethal variant of P ovale, but it is quite close to it.
- P ovale has no greater risk than contracting a virus.
- Tropical Western Africa is home to the endemic P ovale malaria.
- The National Vector-borne Disease Control Programme (NVBDCP) estimates that almost 5 lakh Indians were afflicted with malaria, with Plasmodium falciparum accounting for 63% of cases.
- The malaria parasite P. falciparum is the most harmful in the world.

- **Malaria and climate change:**

- The yearly report included an emphasis on malaria and climate change for the first time due to the rising frequency of extreme weather events.
- The malaria parasite and mosquito are highly susceptible to changes in temperature, humidity, and precipitation, all of which can broaden the disease's geographic distribution.

- **Changes in climate can:**

- directly expand the areas where malaria is spreading.
- reduce the availability of healthcare services and prompt treatment, so mitigating the disease's effects indirectly.
- Rising temperatures are predicted as a result of climate change, making newly developed regions—particularly those in the Himalayan belt—suitable for the spread of the illness.
- States with sporadic extremely heavy rains will also experience the emergence of high risk areas.

- **Problems:**

- **Threats from biology:**

- **Among the biological dangers are:**

- medication resistance.
- pesticide resistance.
- deletions of genes in parasites that complicate diagnosis.

- **The vivax malaria challenge:**

- Viral malaria, which causes more than 40% of malaria cases in India, is another problem.
- It is well known that the vivax plasmodium hides in the liver and frequently causes infections.
- Therapy must be administered for 14 days in order to treat.
- The problem with that is, once they start feeling better, many quit taking the medication and do not finish the course of treatment.

- **The next steps:**

- The nation is reporting fewer cases, so the hunt for and treatment of the few cases that remain must be stepped up.
- Any intervention in areas where the majority of cases are reported leads to a sharp decline in the number of cases when the disease burden is higher.

- But when the numbers decline, the instances become dispersed and harder to locate, which is when surveillance becomes important.
- Real-time digital data on these cases was crucial in order to support local administrations in properly planning their interventions.

- ***Source → The Hindu***

3 – Jal Jeevan Hariyali Abhiyan:

GS II

Government Policies and Interventions:

- **About the Mission:**

- The international community praised the Bihar government's afforestation efforts at the ongoing United Nations Climate Change Conference of the Parties (COP-28) in Dubai, especially those carried out through the Jal-Jeevan-Hariyali Abhiyan (Rural Development Department).
- Initiated in 2019, the "Jal-Jeevan Hariyali Abhiyan" highlights the natural relationship between vegetation coverage, water management, and life itself.

- **This ambitious multi-stakeholder programme aims to accomplish the following:**

- maintenance of the temperature, preservation, and revitalization of water bodies.
- to prevent contamination of water.
- preserving the groundwater's level.
- making sufficient water available.
- agribusiness resistant to climate change.
- energy preservation and
- raising public awareness of climate change.
- The initiative presents a viable strategy for reducing the negative effects of climate change.
- Over 1.5 lakh water bodies have been created and restored as a result of the campaign in just four years.
- The State's percentage of green space has grown from 9.9% in 2019 to 14.75% in 2021, with 381.008 million plantations added since 2012–2013.
- In areas of Sub-Saharan Africa and South Asia that are susceptible to climate change and endure erratic floods and droughts, respectively, the Jal-Jeevan-Hariyali Abhiyan experience could be duplicated.

- ***Source → The Hindu***

4 - Global Stocktake:

GS III

Environmental Conservation:

- **Important information:**

- The findings will dictate what needs to be done going forward in terms of tightening up national regulations, establishing more challenging objectives, or providing financial support for developing nations to make the switch to clean, green energy.
- All nations are required by the Paris Agreement to establish emissions-reduction goals and prepare for the effects of climate change.
- The name for this is NDCs, or nationally determined contributions.
- It was agreed that nations would evaluate their development once, in 2023, and then every five years after that.
- The Paris Agreement seeks to limit global warming to 1.5 degrees Celsius, the temperature at which the earth may still be able to resist the catastrophic effects of climate change, rather than increasing above 2 degrees Celsius from the pre-industrial era (the mid-1800s).

- **The Global Stocktake: What Is It?**

- The Global Stocktake was established in accordance with the Paris Agreement with the aim of evaluating the overall progress made in accomplishing the long-term objectives and the purpose of the agreement.

- **Among these objectives are:**

- reducing greenhouse gas emissions to keep the rise in world temperature to well below 2 degrees Celsius (3.6 degrees Fahrenheit), and ideally to 1.5 degrees Celsius (2.7 degrees Fahrenheit);
- enhancing climate impact resilience and coordinating financial assistance with the size and scope required to address the climate emergency.
- Every five years, the Paris Agreement's Global Stocktake process is intended to evaluate how the world is responding to the climate challenge.
- The inaugural Stocktake is scheduled to end during the UN climate conference (COP28) this yea

- **It assesses global advancements in:**

- reducing emissions of greenhouse gases,
- enhancing climate impact resistance, and
- obtaining funding and assistance in order to confront the climate crisis.
- Countries need to come to a consensus by the end of COP28 on how to use the Stocktake's findings to address the effects of climate change and maintain the global target of keeping temperature rise to 1.5 degrees Celsius.
- The goal of the Global Stocktake is to assess climate action globally, not nationally, and to pinpoint general gaps in achieving the Paris Agreement as well as chances to close them.
- Which Climate Action Aspects Are Included in the Global Stocktake Assessment?
- During the 2018 COP24 in Katowice, Poland, nations decided that the Global Stocktake would focus on three main areas of climate progress:

- **Reduction of damage:**

- assessing international efforts to minimise greenhouse gas emissions and limit temperature rise to less than 2 degrees Celsius (3.6 degrees Fahrenheit), ideally 1.5 degrees Celsius (2.7 degrees Fahrenheit), as well as locating potential areas for further emission reductions.

- **Modification:**

- tracking developments in a nation's capacity to strengthen resilience and lessen susceptibility to the effects of climate change.
- Implementation strategies, such as funding, technology transfer, and capacity building:
- evaluating how well finance flows are matching up with targets for reducing emissions and establishing climate-resilient communities, and supporting developing countries in their efforts to combat climate change.

- **Additional features of the Stocktake:**

- In order to help evaluate the steps and assistance required to respond to climate impacts that exceed the capacity of ecosystems and communities to adapt, the Global Stocktake is designed to address loss and damage.
- It also takes into account the unforeseen social and economic repercussions that reaction measures, or actions taken in response to climate change, may have.
- The goal of the Global Stocktake is to draw attention to how crucial it is to advance equity and use the best available evidence to guide policy decisions about the climate problem.

- **The next step:**

- **Bolstering national climate policies:**

- Clearly signalling that nations will submit improved NDCs with aggressive 2030 and 2035 climate targets well ahead of COP30 should be part of the response to the Global Stocktake.
- Funding will be necessary to make it possible for these NDCs to be developed and implemented.
- The UN Secretary General may call a high-level meeting in early 2025 and invite nations to report their updated NDCs and financial pledges as a result of the Global Stocktake.
- To assist in informing NDCs and other national commitments, countries may also invite voluntarily conducted national, regional, and thematic stocktakes in 2024.
- Quickly and fairly abandoning fossil fuels and increasing the use of renewable energy sources:
- We cannot address the climate catastrophe unless we address the fundamental cause of the issue, which is the use and financing of fossil fuels.
- Along with moving away from fossil fuels, nations need to pledge at COP28 to boost the share of renewable energy in the world's electrical generation to at least two thirds by 2030 and to treble annual renewable energy capacity.
- Restructuring land use, agriculture, forestry, and food systems to increase resilience, improve food security, and fairly reduce emissions:
- In light of the growing effects of climate change, failure to quicken this systemic change will impede attempts to end food insecurity, hunger, and poverty worldwide.
- By 2030 (as opposed to 2020 levels), scaling up climate-smart agriculture can increase yields while reducing greenhouse gas emissions from agricultural production by as much as 25%.
- By 2030, nations must also pledge to stop deforestation and degradation, switch to a healthy, sustainable diet, and cut down on food loss and waste by half.
- Cutting transportation emissions quickly and switching to fuel-free transportation:
- Almost 90% of all energy needs for transportation are still met by fossil fuels.
- By 2030, nations ought to increase the proportion of fossil fuel-free transportation to a minimum of two-thirds of all passenger travel.

- **This comprises:**

- transferring a sizeable portion of travel to non-motorized, public transportation like cycling,
- bringing the proportion of electric cars sold worldwide to at least 75% quickly and
- By 2030, sales of zero-carbon trucks should reach 30%.
- Increasing funding and other forms of assistance for adaptation:
- Resources are desperately needed to improve their ability for adaptation and deal with losses and damages in countries and communities that have contributed the least to the climate catastrophe yet frequently experience its most devastating effects.

- **Developed countries need to complete at least:**

- reaching twice as much financing for adaptation by 2025.
- expand the provision of affordable, high-quality adaptation assistance to regional players, and
- Give grant-based funding for loss and damage top priority.
- Fulfilling climate finance pledges to facilitate net-zero emissions and development that is climate resilient:
- Rich countries need to ensure faster access to higher-quality financing (via grants, for example) and make up for the gaps since 2020 by meeting their $100 billion annual climate finance promise this year.
- Additionally, a strong new climate financing target that will be decided upon at COP29 ought to be made possible by the Global Stocktake.
- This entails going above and above the $100 billion goal and putting a fair emphasis on both adaptation and mitigation, particularly for developing nations that are most susceptible.
- Government and private sector investments combined must reach $5.2 trillion year by 2030, and countries must attain a 7-to-1 ratio of clean energy investments to fossil fuel investments.

- **Changes:**

- Simultaneously, the international financial system requires fundamental modifications, such as adjustments to the multilateral development banks (MDBs) and strategies for nations experiencing debt crises exacerbated by climate change.

- ***Source → The Hindu***