



WEEKLY CURRENT AFFAIRS

JULY, 2022

Week-4

22-31 July, 2022

★★ Useful for ★★

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

22nd JULY, 2022

Nordic Stream

- **Context:** Russia's Gazprom recently said it would again reduce gas deliveries through Nord Stream 1 by 20% for 'repairs,' cutting the current flow in half.

Key Highlights

- Russian gas giant Gazprom said it will be cutting gas delivery by 33% daily, that would correspond to 20% of the pipeline's capacity.
- The full capacity of Nord Stream 1 is over 160 cubic meters of gas exported daily. Stopping the turbine will result in reduced capacity of 33 million cubic meters.
- The EU is heavily reliant on Russian gas. Last year, Russia supplied some 40 percent of the EU's natural gas.

About Nordic Stream

- Nord Stream 1, which is majority-owned by Gazprom, is the single biggest pipeline bringing crucial supplies of Russian natural gas to Europe via Germany.
- Nord Stream 1 begins north of Saint Petersburg in Russia and ends at a station near Greifswald on Germany's northern Baltic Sea coast.

N-Treat Technology

- **Context:** To prevent sludge and sewage from 25 storm water drains between Bandra and Dahisar from flowing into the sea, Brihanmumbai Municipal Corporation (BMC) has planned in-situ treatment of sewage from the drains through N-Treat technology.

Key Highlights

- The project will be undertaken with the help of Indian Institute of Technology-Bombay's (IIT-B) N-Treat Technology.
- The floating matter will be removed daily, silt deposits from the silt traps will be removed once in four months, and plants will be trimmed as required.

- The floating matter collected every day will be disposed of at the nearest municipal waste collection point daily.
- This project will deal with the collective water flow of 1,11,150 kilo litres of water per day from the 25 nullahs, having an overall length of 2.9 km.
- The project will take place over the next five-and-a-half years, and the first six months will be required for installing the equipment.

About N-treat Technology

- N-Treat is a seven-stage process for waste treatment that uses screens, gates, silt traps, curtains of coconut fibers for filtration, and disinfection using sodium hypochlorite.
- It is a natural and environment friendly way for sewage treatment. Its set up takes place within the nullah channels, that is through the in-situ or on-site method of treatment, and does not require additional space.
- Aside from a floating bed on the surface, IIT-B has proposed suspending floating rafts vertically, called florafts.
- According to its proposal, "Their hanging roots would provide a large surface area for passive filtration as well as development of microbial consortium. In the floating wetlands, plants acquire nutrition directly from the water column for their growth and development, thus reducing the organic as well as inorganic pollutants."
- The final stage for sewage treatment will include disinfection using sodium hypochlorite, to kill the bacteria in the water.

23rd JULY, 2022

Low Temperature Thermal Desalination (LTTD) Technology

- **Context:** National Institute of Ocean Technology (NIOT) has developed Low Temperature Thermal Desalination (LTTD) technology for conversion of seawater to potable water.

Key highlights

- In a written reply to a question in the Rajya Sabha, Dr Jitendra Singh said, Ministry of Earth Sciences (MoES) through its autonomous Institute, National Institute of Ocean Technology (NIOT) has developed Low Temperature Thermal Desalination (LTTD) technology for conversion of seawater to potable water.
- The technology has been successfully demonstrated in Lakshadweep islands.
- Three desalination plants based on the LTTD technology have been developed and demonstrated at Kavaratti, Agati and Minicoy Islands of Union Territory of Lakshadweep.
- The capacity of each of these LTTD plants is 1 Lakh litre of potable water per day.
- Based on the success of these plants, Ministry of Home Affairs (MHA) through Union Territory (UT) Lakshadweep has entrusted the work of establishing 6 more LTTD plants at Amini, Androth, Chetlet, Kadmat, Kalpeni and Kiltan with a capacity of 1.5 lakhs litres/day.
- The LTTD technology is found suitable for Lakshadweep islands where the required temperature difference of about 15C between sea surface water and deep-sea water is found in the vicinity of Lakshadweep coasts only as of now.
- The cost of desalination plants depends on a number of factors inter alia which includes technology used and location of the plant.
- The total cost of the six LTTD plants in Lakshadweep islands is Rs. 187.75 cr.

India Innovation Index

- **Context:** NITI Aayog recently released the India Innovation Index 2021.

Key Highlights

- The Index has found that the country's overall spending on R&D has been one of the lowest in the world.

- R&D investment in India, in fact, has declined from 0.8% of the GDP in 2008–09 to 0.7% in 2017-18.
- As per NITI Aayog's report, India's Gross Expenditure on Research and Development (GERD) is lower than the other BRICS nations.
- Brazil, Russia, China and South Africa spend around 1.2%, 1.1%, above 2% and 0.8% respectively.
- The world average is around 1.8%.
- Developed countries the United States, Sweden, and Switzerland spend about 2.9%, 3.2% and 3.4%, respectively.
- Israel spends 4.5% of its GDP on R&D, the highest in the world.
- Karnataka has retained its top spot in the 'Major States' category, followed by Telangana and Haryana in innovation.
- Manipur has emerged as the best performer among the north-eastern and hilly states, followed by Uttarakhand and Meghalaya.
- Among the Union Territories and city-states, Chandigarh is the top performer, followed by Delhi.

About India Innovation Index

- The India Innovation Index is prepared by the NITI Aayog and the Institute for Competitiveness.
- The number of indicators has increased from 36 (in the India Innovation Index 2020) to 66 (in the India Innovation Index 2021).

24th JULY, 2022

India's Bioeconomy Report, 2022

- **Context:** Biotechnology Industry Research Assistance Council (BIRAC) recently released India Bioeconomy Report 2022.

Key Highlights

- The report said the country's bioeconomy has reached over USD 80 billion in 2021, registering a 14.1 per cent growth over USD 70.2 billion in 2020.

- It said that India generated USD 219 million of bioeconomy daily, adding USD 80.12 billion in 2021.
- On an average, at least three biotech startups were incorporated every day in 2021 (a total of 1,128 biotech startups set up in 2021) and the industry crossed USD 1 billion in research and development spending.
- On the vaccine front, India administered nearly 4 million doses of Covid-19 vaccines per day.
- BIRAC/DBT has established a strong network of 74 specialized bio-incubation centers in 21 states/UTs, including 7 bio-incubators in the northeast region.
- Using the newly launched app, verification of Aadhaar card holders can be done anytime and at any place. Hence, Aadhaar holders would not need to carry physical identification.
- The biometric data of Aadhaar card holders will be stored in the Central Identity Data Repository. Therefore, the data would not go into private hands.
- According to UIDAI, this app can be used for Aadhaar face authentication for various other apps.

25th JULY, 2022

India's Bioeconomy

- India is among the top three in South Asia and top 12 destinations for biotechnology in the world, with approximately 3 per cent share in the global biotechnology industry.
- Moreover, India has the 2nd highest number of USFDA approved manufacturing plants outside the US.
- In case of sustainable biofuel, target year for 20 per cent ethanol blending has been advanced from 2025 to 2023 and this biotech sub-sector has shown two times growth.

Aadhaar FaceRD App

- **Context:** The Unique Identification Authority of India (UIDAI) has launched an app-Aadhaar FaceRD App, to help with face authentication as a method of confirming an Aadhaar holder's identity.

Key Highlights

- The application allows Aadhaar Authentication User Agencies (AUA) to capture a person's face for the authentication process.
- Aadhaar Face Authentication technology has been developed in-house by UIDAI.
- Aadhaar FaceRD App captures a live person's face for Aadhaar authentication using Face Authentication Technology.

Anti-Piracy Bill, 2022

- **Context:** Minister of External Affairs S. Jaishankar introduced a bill in Parliament that provides for stringent punishment, including death penalty, for those involved in piracy at sea.

Key Highlights

- The introduction of the bill came after some 18 Indians aboard a crude oil carrier were kidnapped off the coast of Nigeria. India is still negotiating the release of its nationals.
- The Anti-Maritime Piracy Bill 2019 is aimed at promoting the safety and security of India's maritime trade, and the safety of its crew members.
- The aim of drafting the proposed legislation is to keep up with India's commitment to the United Nations Convention on the Law of the Sea (UNCLOS), which concluded in 1982. India had ratified the UNCLOS in 1995.
- Section three of the bill says that "whoever commits any act of piracy, shall be punished (i) with imprisonment for life; or (ii) with death, if such person in committing the act of piracy causes death or an attempt thereof."
- The bill noted that incidents of piracy have been growing since 2008, with the Gulf of Aden seeing a major uptick in attacks by pirates from Somalia. This route is used by about 2,000 ships each month for trade between Asia and Europe and East Coast

of Africa. With the enhanced (international) naval presence in the Gulf of Aden, pirates shifted their area of operations eastwards and southwards. This led to a flurry of piracy incidents towards the western coast of India as well.

Jharkhand's New Tourism Policy

- **Context:** Jharkhand Chief Minister Hemant Soren recently launched the Jharkhand tourism Policy.

Key Highlights

- The policy focuses on "extraction to attraction".
- The government is aiming to encourage Indian and foreign private investment and participation in tourism infrastructure projects. The new tourism policy includes strategic joint ventures with private tour operators for setting up tourist packages and services, upgrading tourist information centres, and conducting a detailed assessment of tourism potential in every district.
- The state also plans to introduce the Jharkhand Tourism Home Stay Scheme, a bed-and-breakfast scheme of the state's tourism ministry, on the lines of 'Incredible India'.
- The policy proposes to enhance connectivity within the state through road permits to tour operators and aggregators.
- The government will provide a single-window system and 20-25 per cent capital investment subsidy (up to Rs 10 crore) and a reimbursement of 75 per cent of net goods and services tax paid for five years, to those investing in the state's tourism sector.
- Other incentives include not levying holding tax for five years, reimbursing electricity duty and stamp duty, and captive power generating subsidy of 30 per cent up to Rs 5 lakh. The fiscal incentives include an interest subsidy at 50 per cent (up to Rs 20 lakh) for five years.
- The government will also provide special provisions for women, ex-servicemen, the differently-abled, and people belonging to scheduled castes and scheduled tribes.

- A security force will be set up by involving ex-servicemen. To prevent tourists being exploited by service providers, legislation for facilitating tourism trade has also been enacted.

Monkeypox

- **Context:** World Health Organisation (WHO) declared the monkeypox outbreak a Public Health Emergency of International Concern (PHEIC).

Key highlights

- The World Health Organisation (WHO) has declared the monkeypox epidemic a global health emergency.
- The committee of independent advisers were split on their decision on whether to call the growing monkeypox outbreak a public health emergency of international concern (PHEIC) the highest level of alert. The head of the WHO, Dr Tedros Adhanom Ghebreyesus, broke the deadlock and declared the outbreak a PHEIC.
- The first case of monkeypox was reported in a child in the Democratic Republic of the Congo (then Zaire) in 1970. Since then, outbreaks have generally been small and traceable to an individual who recently returned from a country where the virus is endemic that is, countries in west and central Africa. But the current outbreak is unlike any previous one outside of Africa in that there is sustained person-to-person transmission of the infection.
- As of July 2022, there have been 16,593 confirmed infections in 68 countries.
- Most infections have been reported from Europe.

About Monkeypox

- Monkeypox is a viral zoonotic disease that occurs primarily in tropical rainforest areas of central and west Africa and is occasionally exported to other regions. It is caused by monkeypox virus, a member of the Orthopoxvirus genus in the family Poxviridae.
- Monkeypox virus is transmitted from one person to another by close contact with lesions, body fluids, respiratory droplets and contaminated materials such as bedding.

- Monkeypox is usually a self-limited disease with the symptoms lasting from 2 to 4 weeks. Severe cases can occur. In recent times, the case fatality ratio has been around 3–6%.

26th JULY, 2022

World Economic Outlook Update

- **Context:** The International Monetary Fund (IMF) lowered India's economic growth forecast for the current fiscal to 7.4% from the 8.2%.

Key Highlights

- The multilateral agency also cut India's growth forecast for the next fiscal by 0.8 percentage points to 6.1% amid growing economic risks.
- Despite the growth downgrade, India will remain one of the fastest growing major economies in the world in 2022-23 and 2023-24
- Meanwhile, the IMF also cut the 2022 global domestic product (GDP) estimate to 3.2%.
- In its latest World Economic Outlook update, IMF suggested policymakers prioritize taming inflation through further monetary policy tightening.
- The IMF also cut the global growth outlook and warned that the world may soon be on the brink of a recession.
- Global economic expansion will likely slow to 3.2% this year, slower than the 3.6% forecast by the fund in April.

Ramsar Sites

- **Context:** Five new Indian sites have been recognised as wetlands of international importance, as part of the Ramsar Convention.

Key highlights

- Three wetlands from Tamil Nadu and One each from Mizoram & Madhya Pradesh have been identified under the Ramsar Convention.
- After this, total number of Ramsar Sites in India has reached to 54, as opposed to 49 earlier.

- The Ramsar convention was established by UNESCO on February 2, 1971. It is named after Ramsar city in Iran where the convention was signed. It is an intergovernmental environmental treaty which encourages the international cooperation and national action to conserve the wetlands and sustainably use their resources.

The sites that are designated as wetlands of international importance are:

1. Pallikaranai Marsh Reserve Forest, Tamil Nadu: It is a freshwater marsh in Chennai.
2. Karikili Bird Sanctuary, Tamil Nadu: It is a 61.21-hectare protected area located in Kancheepuram District of Tamil Nadu.
3. Pichavaram Mangrove, Tamil Nadu: It is located near Chidambaram in Tamil Nadu and is one of the largest mangrove forests in the country.
4. Pala wetland, Mizoram: It is the largest natural wetland in Mizoram.
5. Sakhya Sagar, Madhya Pradesh: This lake is an integral part of Madhav National Park in Shivpuri, Madhya Pradesh.

Indermit Gill

- **Context:** World Bank has appointed Indian national Indermit Gill as its Chief Economist and Senior Vice President for Development Economics.

Key Facts

- Indermit Gill will succeed American economist Carmen Reinhart in the role and his appointment will be effective 1 September 2022.
- Gill is currently Vice President for Equitable Growth, Finance, and Institutions, where he led work on macroeconomics, debt, trade, poverty, and governance.
- Between 2016 and 2021, he was a professor of public policy at Duke University and non-resident senior fellow in the Global Economy and Development program at the Brookings Institution.

- Gill will be only the second Indian to serve as chief economist at the international financial institution after Kaushik Basu, who was Chief Economist of the World Bank from 2012 to 2016.
- Raghuram Rajan and Gita Gopinath, two other notable Indian economists, have served as chief economists of the International Monetary Fund (IMF), a body closely affiliated with the World Bank.

27th JULY, 2022

Winston Churchill Leadership Award

- **Context:** British Prime Minister Boris Johnson presented Ukrainian President Volodymyr Zelenskyy with the Sir Winston Churchill Leadership Award, drawing comparisons between the two leaders in times of crises.

Key Highlights

- Zelenskyy accepted the award by video link during a ceremony at Johnson's London office that was attended by members of the Churchill family, Ukrainian Ambassador Vadym Prystaiko and Ukrainians who have received training from British soldiers.
- The Ukrainian leader received a standing ovation in the British Parliament in March, when he invoked one of Churchill's most famous speeches and vowed to fight Russian troops in the air, sea and on the streets.
- The Churchill leadership award was first presented in 2006.
- Past recipients include Prince Charles, former British Prime Ministers Margaret Thatcher and John Major, and former US Secretary of State Madeleine Albright.

Revival package for BSNL

- **Context:** The Union Cabinet has cleared a Rs 1.64-lakh crore package for revival of state-owned telecom service provider Bharat Sanchar Nigam Limited (BSNL).

Key Highlights

- The revival package has been released with the focus on fresh capital for upgrading the loss-making company's network and allocating spectrum for it to offer 4G services, de-stressing its balance sheet and augmenting its fiber network.
- The four-year revival strategy follows a 2019 booster, when the government announced a Rs 70,000-crore package mainly to cover a voluntary retirement scheme for BSNL employees.
- Of the total revival package announced recently, Rs 43,964 crore will be a cash component, while the remaining Rs 1.2 lakh crore of non-cash component will be spread over four years.
- The Center will make administrative allocation of spectrum BSNL needs to offer 4G services.
- The allocation of spectrum in 900/1,800 MHz band at the cost of Rs 44,993 crore would be through equity infusion.
- Further, to enhance the operator's wireline offering, the Telecom Department has proposed the merger of Bharat Broadband Nigam Ltd (BBNL) with BSNL. BBNL is the nodal agency for executing the BharatNet project.
- The infrastructure created under BharatNet will continue to be a national asset, accessible on a non-discriminatory basis to all the telecom service providers.
- To de-stress the balance sheet, Rs 33,404 crore statutory dues will be converted into equity. The Center will also provide sovereign guarantee for raising money to repay current loans.

28th JULY, 2022

Chief Minister's Breakfast Scheme

- **Context:** The Tamil Nadu government issued an Order to implement the first phase of the 'Chief Minister's Breakfast Scheme'.

Key highlights

- It will be implemented at 1,545 government primary schools to benefit more than 1.14 lakh children in Classes I-V across the State during 2022-23.
- As much as possible, breakfast prepared with millets available in the region could be provided to students at least two days every week.
- Every student is to be provided with a cooked meal of 150–500-gram breakfast with sambar with vegetables.

Power Generation Capacity

- **Context:** Ministry of Power and New & Renewable Energy has estimated India's electricity generation capacity to reach 820GW by 2030 (out of this 500 GW will be from renewable resources)

Key facts

- TERI released a "roadmap for feasible pathways to achieve decarbonisation targets" (we will cover the report in detail in tomorrow's CA)
- At COP26, India announced the highly ambitious goal of decarbonizing energy to 50% and achieving 500 GW of fossil fuel-free generating capacity by 2030

Anti-retroviral Therapy (ART)

- **Context:** India is a facing shortage of dolutegravir (given to adults and children) and nevirapine drugs (only for infants) used in ART for HIV-positive patients.

Key facts

- These drugs help in protecting CD4 cells thus keeping the immune system strong enough to fight off the disease.
- HIV attacks CD4 (a type of White Blood Cell (T cells)- which detects anomalies and infections in cells). Patient with HIV can have CD4 count as low as 200 (a normal person has a 500-1600 count).
- As per the India HIV Estimation 2019 report, incidences of HIV had been reducing in India since 2000.

NOTE:

Recently, a US patient with leukaemia has become the first woman and the third person to date to be cured of HIV after receiving a stem cell transplant from a donor who was naturally resistant to the virus that causes AIDS.

29th JULY, 2022

India Family Planning 2030 Vision Document

- **Context:** Union Minister of State for Health and Family Welfare has stated that India has achieved RLF (Replacement Fertility rate) reaching a total fertility rate of 2.1 or less.

Key issues:

- Teenage Childbearing and early/child marriage declined to 6.8% (2019-21) from 7.9% (2015-16).
- Married adolescent girls and young women reported a high unmet need for contraception. Although modern contraceptive use among married adolescents and young women has increased, it remains low.
- From NFHS-4 to NFHS-5, India witnessed an impressive improvement in contraceptive use and unmet need
- Lack of access to contraceptives, non-awareness, non-participation of males and inaccessibility to health facilities is a major concern of family planning
- Male contraceptive methods were largely limited to condoms. Male sterilisation was at 0.3%.
- Need to involve the private sector to provide modern contraceptives: Private sector contributes 45% share of pills and 40% share of condoms.

DO YOU KNOW:

India was first country in the world to launch a National Programme for Family Planning (1952).

Prevention of Money Laundering Act (PMLA)

- **Context:** The Supreme Court recently upheld the 2019 amendments to Prevention of Money Laundering Act (PMLA).

Key highlights

- Supreme Court accepted that the definition of Money Laundering includes every aspect of the proceeds of crime and not just the final act of money laundering.
- Statement recorded before ED will be accepted as ED is not a police official (and therefore can't be challenged on the ground of being self-incriminatory)
- Enforcement Case Information Report (ECIR) cannot be equated with an FIR (as ECIR is an internal document of ED) and therefore directive to share ECIR with the accused can't be issued.

About PMLA Amendments

- The key amendments provided extensive power to Enforcement Directorate (ED) for summons, arrests and raids, and makes bail provisions difficult while shifting the burden of proof of innocence onto the accused rather than prosecution.
- PMLA act was enacted in 2002 to fight the menace of money laundering (under the commitment of the Vienna Convention). It is being implemented by ED (under Department of Revenue, Ministry of Finance)

30th JULY, 2022

INS Vikrant

- **Context:** The Indigenous aircraft carrier INS Vikrant has been delivered to Indian Navy.

Key facts about INS Vikrant:

- It is India's first indigenous aircraft carrier that has been built by Cochin Shipyard.
- INS Vikrant is a 45,000-tonne warship, constructed at a cost of around Rs 20,000-crore.

- It is 262-meter long and 62-meter wide. It has an operational endurance of 7500 nautical miles, with cruising speed of 18 knots.
- The aircraft carrier is capable of carrying 30 fighters and helicopters.
- The carrier will be christened INS Vikrant, in the honour of India's first aircraft carrier that was acquired in 1961 from United Kingdom. India's first aircraft carrier had played a significant role in 1971 war and was decommissioned in 1997.
- INS Vikrant is powered through four gas turbines, with total power of 88 MW.
- It has an overall indigenous content of 76%.
- It will have a crew of 1,700, including women.

Gujarat Semiconductor Policy, 2022-27

- **Context:** Gujarat Government recently unveiled a dedicated 'Gujarat Semiconductor Policy 2022-27'. The policy aims created at least 2,00,000 new employment opportunities over the five years.

Key highlights

- Gujarat is the first state in India to release a dedicated semiconductor policy.
- Under the Gujarat Semiconductor Policy 2022-27, Gujarat Government will provide heavy subsidies on power, water and land tariffs for entrepreneurs who are interested in investing in semiconductors or display fabrication manufacturing in Gujarat.
- The policy is aimed at making the state first in developing Electronics System Design & Manufacturing (ESDM) ecosystem.
- It will provide for effective and timely execution of eligible projects, in a bid to set up a robust semiconductor and display fabrication ecosystem.
- It focuses on providing guidance to a significant portion of investments under the India Semiconductor Mission policies towards Gujarat.

About India Semiconductor Mission

- Ministry of Electronics and IT (MeitY) launched 'India Semiconductor Mission' in 2021, with total financial outlay of Rs 76,000 crore.
- The mission is aimed at providing financial support to companies that invest in semiconductors, design ecosystem and display manufacturing.

31st JULY, 2022

India at Commonwealth Games 2022

So far, India has won 6 medals at the Commonwealth Games 2022, including 3 Golds, 2 Silvers and 1 Bronze.

Key highlights

- Weightlifter Mirabai Chanu won India's first gold medal, while Jeremy Lalrinnunga won second gold. Achinta Sheuli won the third gold for India.
- Jeremy Lalrinnunga lifted a 300kg (140kg in Snatch + 160kg in Clean & Jerk), making a record at the commonwealth games. He won the medal in 67 kg category of weightlifting.
- Mirabai Chanu had won the first gold medal for India. She lifted a total of 201 KG in women's 49 KG weightlifting event.
- Achinta Sheuli won the gold, by lifting 313 kg in Men's 73 kg Weightlifting event.
- In men's 55 kg weightlifting event, Sanket Sargar won silver medal.
- In women's 55 kg weightlifting event, Bindyarani Devi bagged a Silver Medal.
- India's only bronze medal was bagged by Gururaja Poojary, in Men's 61kg weightlifting category.

Mosi-oa-Tunya

- **Context:** Recently, Zimbabwe launched gold coins named "Mosi-oa-Tunya" in a bid to control the inflation in country.

Key highlights

- The Reserve Bank of Zimbabwe announced the launch and distributed 2,000 coins to commercial banks.
- Zimbabwe has been experiencing high inflation for a decade now. It has been trying to control it in many other ways.
- In 2022, the value of Zimbabwe's dollar decreased against major currencies. As a result, black marketing of US dollars started by citizens in Zimbabwe. Thus, Zimbabwe launched new gold coins to control the black marketing of dollar.
- These gold coins can be used by international investors, to do insurance against inflation and conflict.

Features of the Gold coin:

- The gold coin is called as "Mosi-oa-Tunya" which means "The Smoke Which Thunders". It also refers to Victoria Falls in native Tonga language.
- Coins have been given the status of liquid asset. Thus, they can be easily converted into cash. They are also easily tradable, locally and internationally tradable.
- Coins can be used by Individuals or companies. They can purchase coins from banks and other authorised outlets. The coin holders can trade coins for cash, after 180 days from the date of purchase.
- Foreigners can also purchase the coins, however, only in foreign currency.
- Price for the gold coins will be decided on the basis of international market rate for an ounce of gold. Additional 5% will be added for cost of production of the coin.