DAILY CURRENT AFFAIRS ANALYSIS

04 JULY 2023

1 - Current account deficit:

GS III

Indian Economy

- **Context:**

- India's current account deficit (CAD) dropped from 2% of GDP in the third quarter to 0.2% of GDP in the fourth during the final three months of the fiscal 2022–2023 year.

- **Information on the current account deficit (CAD):**

- The current account deficit, also known as the CAD, is a crucial indicator of a nation's external sector.
- When a nation's imports of goods and services exceed its exports of those same goods and services, a current account deficit is created.
- The fiscal deficit is one of the "twin deficits," which are considered as competitors by investors and the stock market.
- The fiscal deficit is the amount of money that the government must borrow each year to make up the difference between its spending and revenue.

- **What does a lower CAD represent?**

- In essence, the current account deficit is the gap between investments and savings.
- Foreign savings are necessary to close a current account deficit of a nation.
- The gap can be filled with less money when the current account deficit is minimised.
- It is also seen as a representation of the economy's tenacity.

- **For FY2023, in US dollars:**

- The current account balance showed a deficit of 2% of GDP in 2022–2023 as opposed to a deficit of 1.2% in 2021–2022.
- In only one year, the trade gap widened from $189.5 billion to $265.3 billion.
- Due to modest external imbalances, the FY23 CAD was held under control at 2% of GDP in Q4 FY23, which was lower than the market expectation of over 3-3.5%.

Source → The Hindu

2 – Aspartame:

GS II

Health related Issues

- **Context:**

- The popular sugar substitute aspartame will be labelled by the WHO's cancer research division as "possibly carcinogenic to humans."

- **In relation to aspartame:**

- One of the most widely used artificial sweeteners is aspartame, which is present in a number of diet soft drinks, chewing gum, ice cream, breakfast cereals, and other goods.
- Chemically speaking, aspartame is a methyl ester of the dipeptide that is made up of the natural amino acids L-aspartic acid and L-phenylalanine.
- Aspartame is around 200 times sweeter than table sugar.

- Phenylketonuria (PKU), an uncommon genetic disorder in which the patient lacks the enzyme required to break down phenylalanine, one of the two amino acids in aspartame, is not advised for consumption.
- One of the roughly 100 countries that permit the use of aspartame is India.

Source → The Hindu

3 - The Bald Eagle:

GS III

Environmental Conservation

- **Context:**

- According to a report from the US Fish and Wildlife Service from 2021, the number of bald eagles living in the wild has increased by half since 2009.

- **About Bald Eagle:**

- The bald eagle is a predatory bird native to North America.

- Its range include the bulk of Canada, Alaska, the contiguous United States, and northern Mexico.
- It resides close to huge open water areas with an abundance of food.
- Fish are the bald eagle's main food source.
- It builds the largest bird nest in North America and the largest tree nest ever recorded for any animal species.
- The national bird of the United States is the bald eagle, which can be seen on the seal of the flag.
- In the latter decades of the 20th century, it was in risk of going extinct.
- Populations have since grown, and in 1995 the species' status was altered from "endangered" to "threatened" until being totally removed off the list in 2007.

Source → The Hindu

4 - Green Credit Scheme:

GS II

Government Policies and Interventions

- **Context:**

- The Environment Ministry has published a draught notification outlining a proposed "Green Credit Scheme" that would honour several initiatives.

- **The programme for green credits:**

- To utilise a competitive market-based approach for green credits and promote voluntary environmental activities among many stakeholders, it is recommended that a national green credit programme be formed.

- **It will promote:**

- tree planting done methodically.
- conservation of water and waste management.
- purifying the air.

- It will enable individuals and organisations to create "green credits."
- These credits can also be converted into cash.
- Unlike carbon markets, where only greenhouse gas emissions were traded, the Green Credit Scheme required accounting for a variety of actions.

- **Aim:**

- to build a green credit-based market-based system for award distribution.

- Eight categories of undertakings that may qualify for producing credits are listed in the announcement:

- To promote actions that improve the amount of green cover by planting trees and other relevant things, green credits based on tree plantations are utilised.
- a water-based green credit system that promotes water conservation, efficiency, and savings while also promoting wastewater treatment and reuse.
- Sustainable agriculture-based green credit encourages natural, regenerative agricultural practises and land restoration in order to boost productivity, soil health, and the nutritional value of the food produced.
- Waste management-based green credit is intended to promote better and more sustainable practises.

- To encourage efforts that will reduce air pollution and other types of pollution. Green Credit based on Air Pollution Reduction.
- Through the Mangrove Conservation and Restoration based Green Credit, support initiatives for mangrove conservation and restoration.
- With the use of the Ecomark-based Green Credit, encourage producers to obtain the Ecomark label for their goods and services.
- For environmentally friendly construction and infrastructure: to encourage the construction of structures and other infrastructure using sustainable technology and materials.

- **What are the workings of the Green Credit?**

- As a byproduct of a climate-related action that produces Green Credits, carbon emissions may be decreased or completely eliminated.
- In accordance with the Carbon Market, the same action that creates Green Credits under the Green Credit Programme may also generate Carbon Credits.

- **What is a carbon market?**

- Emission reductions and removals are converted into tradable assets on the carbon market platform.
- Since an industrial unit that exceeds the emission criteria is eligible to obtain credits, a carbon market will create incentives to cut emissions or improve energy efficiency.
- Additionally, it would make it possible for struggling units to get credit and prove compliance.

- **Regarding India:**

- At the 2021 United Nations Climate Change Conference (COP26) summit, India pledged to achieve net zero carbon emissions by 2070 and a reduction of one million tonnes in emissions over the following 10 years.
- Today, the first step towards accomplishing this goal is thought to be the development of a market for carbon credits.

Source → The Hindu

5 - National Research Foundation:

GS II

Statutory and Non-Statutory Bodies

- **Context:**

- The National Research Foundation (NRF) was recently authorised by the government.

- **Concerning NRF and its objectives:**

- With a focus on defined thrust areas connected to our national goals and towards basic science, the National Research Foundation was established with the intention of improving the country's research ecosystem.
- The National Research Foundation will assist efforts in artificial intelligence and other cutting-edge sectors of scientific and technological investigation while focusing on improving the quality and outcomes of multidisciplinary research.
- The National Research Foundation is expected to develop a stringent peer review procedure that accurately reflects gender equality.
- Thanks in large part to the National Research Foundation, all academic and scientific research across a wide range of subjects will have a single platform.
- It will help researchers choose their areas of study by offering a shared research database and avoiding duplication of effort.
- The NRF is in charge of assisting, promoting, and directing research in higher education establishments.
- In addition to the natural sciences, the NSF would support and promote study in the humanities, social sciences, and arts.
- The NRF's primary objective is to substantially increase the funding—from both public and private sources—available for scientific research in the country.
- India continues to spend less than 0.7% of its GDP on research and development, even while nations like Egypt or Brazil do so more.

- Competitors with developed economies, like the United States, China, Israel, Japan, or South Korea, devote 2 to 5% of their GDPs to advancing science.
- The estimated 50,000 crore rupees for the NRF over a five-year period does not significantly enhance existing spending.

- **The state of research and development (R&D) in India:**

- Equal contributions from the following three important parties are required for research and development:

- **The following five parties make up India's R&D ecosystem:**

- Central Management.
- National Government.
- sectors of the government.
- Sectors of the private economy.
- higher education institutions (Department of Science & Technology, 2020).

- The Central Government has made a disproportionate amount of investments since India's independence, although it is now in decline as private sector investment is increasing.

- **Money invested by numerous parties:**

- **Industry:**

- 36.7% of India's total R&D spending is in this area.
- The majority of R&D investment goes into semiconductor, pharmaceutical, and automotive development.
- Spending scarcely increased by 0.32% during the Covid-19 epidemic in FY20.

- **Government:**

- **Programmes to enhance R&D spending include:**

- the establishment of laboratories (Atal Tinkering Labs), research facilities (NRF), and institutional alliances (IITs, IISc, etc.).
- A patent box that levies a 10% fee on royalties from patents filed in India was enacted by the GoI in 2016.
- the establishment of the Manthan website to encourage business and academic cooperation.

- **Academia:**

- According to a direction from the University Grants Commission, each academic institution must establish a Research and Development (R&D) Cell to promote networking and collaboration for transdisciplinary and multidisciplinary research.

- **The economic significance of research and development (R&D) spending:**

- It acts as a barometer for the inventiveness, technological advancement, and economic expansion of a nation.
- R&D takes place outside of fields like electronics or the medical sciences, which are dominated by STEM.
- To see demonstrable improvements in profitability, sustainability, and quality of life, R&D is required for a number of corporate sectors and macroeconomic activities.

- **R&D is crucial to India's economy.**

- to create accessible regional solutions.
- help increase the spread of information in remote and rural areas.
- to lessen dependency on imports, particularly electronic imports.
- addressing the medical and natural disaster challenges facing the country.
- managing the consequences of climate change with technology.

- **Challenges:**

- **Ongoing cutbacks in spending:**

- Government investment on R&D has almost tripled over the last 10 years, yet its percentage of India's GDP has been continuously declining.

- **Spending less than the global average:**

- India invests significantly less in R&D than the average nation worldwide.
- The World Bank reports that global R&D spending as a proportion of GDP climbed from 1.99 in 2008 to 2.2 in 2018 (The World Bank, 2022).
- In terms of innovation, India is currently rated 46th in the world, much below smaller countries like Iceland and Estonia.

- **Structural difficulties:**

- Those brought about by the policies, procedures, and regulations governing R&D that set the stage for a strong scientific community.

- **shortage of personnel:**

- Difficulties in locating the talent necessary for a knowledge economy.

- **Administration of justice:**

- Navigating our complicated, erratic, but unified administrative procedures presented challenges.

- **Untangible assets:**

- the regulations that govern how inventions are safeguarded.

- **Moving forward:**

- India has a long way to go before it becomes a worldwide innovation powerhouse, according to the statistics.
- Another key cause for concern is the fact that the government's R&D investment as a percentage of GDP has been continuously falling.
- Looking at India's GDP per capita, it is clear that just raising government spending on R&D as a percentage of GDP won't solve the issue.
- As a result, the problem is with the country's overall R&D climate, which needs to be changed.
- The Central Government must encourage and stress the participation of other stakeholders in R&D investments.
- A nation's success on economic indicators affects how affordable R&D is, which improves the chances for innovation and economic growth.
- A country can make money from research in the short term, but it can also make long-term investments with potential returns.
- For the best research outcomes, India has to increase its R&D spending, which now represents less than 1% of its GDP.

Source → The Hindu