R&D Expenditure Ecosystem in India

The report titled **“Research and Development (R&D) Expenditure Ecosystem”** was also released during the **global launch of Global Innovation Index (GII)–2019** by the **Economic Advisory Council to the Prime Minister (EAC-PM).**

The objectives of the report are:

- To address the data gaps in compiling R&D data so that up to date data on R&D is available in order to reflect India’s true rank globally.
- The second objective is to examine expenditure trends in various sectors and their shortcomings.
- The final objective is to lay down the road map for achieving the desired target of R&D spend by the year 2022, i.e 2% of the GDP.

Economic Advisory Council to the Prime Minister

- Economic Advisory Council to the Prime Minister (EAC-PM) is a **non-constitutional, non-statutory, independent body** constituted to give advice on economic and related issues to the Government of India, specifically to the Prime Minister.
- As of July, 2019, the Council consists of: **Dr. Bibek Debroy (Chairman), Shri Ratan P. Watal (Member Secretary), Dr. Rathin Roy (Part-Time Member), Dr. Ashima Goyal (Part-Time Member) and Dr. Shamika Ravi (Part-Time Member).**
- The terms of reference of EAC-PM are:
  - Analyzing any issue, economic or otherwise, referred to it by the Prime Minister and advising him thereon,
  - Addressing issues of macroeconomic importance and presenting views thereon to the Prime Minister.
    - These could be **either suo-motu** or on **reference from the Prime Minister** or anyone else.
    - It also includes attending to any other task as may be desired by the Prime Minister from time to time.

Recommendations

- The growth in research and development (R&D) expenditure should be commensurate with the economy's growth and **should be targeted to reach at least 2% of the Gross Domestic Product (GDP) by 2022.**
- The line ministries at the Centre could be mandated to **allocate a certain percentage** of their budget for research and innovation for developing and deploying technologies as per the priorities of the respective ministries.
- To stimulate **private sector's investment in R&D from current 0.35% of GDP,** it is suggested that a minimum percentage of turn-over of the company may be invested in R&D by medium and large enterprises registered in India.
- To help and keep the industry enthused to invest in R&D, the **weighted deduction provisions on R&D investment should continue.**
- The **states can partner Centre** to jointly fund research and innovation programmes through socially designed **Central Sponsored Schemes (CSS).**
- The report also pitched for **creating 30 dedicated R&D Exports Hub** and a corpus of **Rs 5,000 crore for funding mega projects** with cross cutting themes which are of national interest.

Background

- Investments in R&D are key inputs in economic growth. The impact of this is proven on productivity, exports, employment and capital formation.
- India's investment in R&D has shown a **consistent increasing trend** over the years.
    - However, as a **fraction of GDP, it has remained constant at around 0.6% to 0.7%.**
    - This is **below the expenditure of countries** like the US (2.8), China (2.1), Israel (4.3) and Korea (4.2).
- Government expenditure, **almost entirely the Central Government,** is the driving force of R&D in India which is in contrast to the advanced countries where the private sector is the dominant and driving force of R&D spend.

    There is a **need for greater participation of State Governments** and the **private sector in overall R&D spending** in India especially in application oriented research and technology development.
- Earlier in 2018, the Prime Minister of India had underlined that there should be greater emphasis on collaborative R&D by the Central Public Sector Enterprises (CPSEs) with a focus on partnerships with Indian Institute of Technologies and Universities.
    - Consequently, one hundred fifty-four such innovation cells have been set up by CPSEs which will work on market oriented research.
    - From the year 2014-15 to 2017-18, there has been an increase of 116% in R&D spending by CPSEs.
    - CPSEs of the petroleum and power sector are the biggest spenders in R&D. Therefore, the need of the hour is that all CPSEs must come on board for higher spend on R&D.

Source: PIB