

## **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** 

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