According to the Research & Development (R&D) Statistics and Indicators 2019-20 report, India’s gross expenditure in R&D has tripled between 2008 & 2018 and scientific publications have risen placing the country internationally among the top few.

- The R&D Statistics and Indicators 2019-20 is based on the national S&T survey 2018 brought out by the National Science and Technology Management Information System (NSTMIS).
- The report on R&D indicators for the nation is an important document for the
  - Evidence-based policymaking and planning in higher education,
  - R&D activities and support,
  - Intellectual property,
  - Industrial competitiveness.

**Findings of the Report**

- According to the report, R&D is driven mainly by the government sector.
- Expenditure on R&D:
  - The Gross Expenditure on R&D (GERD) of India nearly tripled between 2007-08 to 2017-18.
  - India’s per capita R&D expenditure has also increased by 1.5 times.
  - Increase in Extramural R&D support by central Science & Technology agencies.
    - Women participation in extramural R&D projects has also increased significantly to 24% in 2016-17 from 13% in 2000-01.
    - These extramural expenditures are the expenditures on R&D that is performed abroad but financed by domestic institutions.
  - India spent 0.7% of its GDP on R&D in 2017-18, While the same among other developing BRICS countries was Brazil 1.3%, Russian Federation 1.1%, China 2.1% and South Africa 0.8%.
- Researchers and scientific publications:
  - The number of researchers per million populations has doubled since 2000.
  - India occupies 3rd rank in terms of number of Ph.D awarded in Science and Engineering (S&E) after USA and China.
  - India is placed 3rd among countries in scientific publication as per NSF database.
- Patent filing:
  - India is ranked at 9th position in terms of Resident Patent Filing activity in the world.
    - During 2017-18 out of total patents filed in India, 32% patents were filed by Indian residents.
    - Patent applications filed in India are dominated by disciplines like Mechanical, Chemical, Computer/Electronics, and Communication.
  - According to the World Intellectual Property Organisation (WIPO), India’s Patent Office stands at the 7th position among the top 10 Patent Filing Offices in the world.

**National Science and Technology Management Information**

- The National Science and Technology Management Information System (NSTMIS) is
It has been entrusted with the task of building the information base on a continuous basis on resources devoted to scientific and technological activities for policy planning in the country.