National Research Foundation (NRF) Bill, 2023

Why in news?

The Union Cabinet has recently approved the introduction of the National Research Foundation (NRF) Bill, 2023.

What are the features of NRF Bill, 2023?

- **NRF** - The bill will establish National Research Foundation as an apex body.
- **SERB** - The bill will repeal the *Science and Engineering Research Board (SERB)*, a statutory body that was established in 2008 to promote basic research in Science and Engineering and to provide financial assistance to persons engaged in R&D.
- SERB will be subsumed into NRF which has an expanded mandate and covers activities over and above the activities of SERB.

What is NRF?

- NRF is one of the key recommendations of the ***National Education Policy (NEP), 2020.***
- It is modelled on the lines of the hugely successful *National Science Foundation of the United States.*
- **Aim** - The NRF intends to act as a *coordinating agency* between researchers, various government bodies and industry, thus bringing industry into the mainstream of research.
- The NRF plans to seed, grow and facilitate research in India's universities, especially State universities, by funding research infrastructure and researchers.
- **Governance** - NRF will be administrated by the ***Department of Science and Technology (DST)*** and governed by a Governing Board.
- **Funding** – The NRF will operate with a budget ***of Rs 50,000 crore*** for five years, of which 28% will be the government's share, and the remaining 72%will come from the private sector.

Composition of Governing Board
• **Ex-Officio President** - Prime Minister • **Ex-Officio Vice Presidents** - Minister of Science and Technology and - Minister of Education • **Executive Council** will govern the functioning of NRF • Executive Council will be chaired by the Principal Scientific Advisor to the Government of India.

What is the significance of NRF?

- **Focus on universities** - The main objectives of the NRF is to get colleges and universities involved in scientific research.
- **Research in social sciences** - It promote research not just in natural sciences but also in humanities, social sciences and art.
- **National priorities -** It also aims to identify priority areas such as clean energy, climate change, sustainable infrastructure, etc. in which S&T interventions can help larger national objectives.
- **Democratisation** - The focus area for NRF is peripheral, rural and semi urban areas which are often neglected.
- **Uniformity –** It also aims to bring uniformity in funding and reduce the bureaucratic hurdle associated in raising money.
- **Internationalization -** It will promote international competition and find solution to complexities of Indian society.

What is the status of R&D in India?

- **R&D expenditure** - India spends around ***0.7% of GDP in R&D*** which is lesser than many other countries.
- Gross expenditure on R&D in India is declined from 0.84% in 2008 to 0.69% in 2018.
- **Research funding** - Eminent institutions like the IITs and IISc get a bulk of research funding but State universities get very little *about 10% of the research funds.*
- **Patents** - According to the World Intellectual Property Organisation (WIPO), although India registered a *16.5% growth in patent grants in 2021,* the patent applications are very much *less than China and US.*
- **Other challenges** - Other challenges that constraints the scientific community includes:
    - Inconsistent funding stream
    - Complex application processes (multiple guidelines & rules)
    - Bias towards established researchers and institutions
    - Straight-jacketed themes which allow little intellectual freedom

- University bureaucracy and procedures result in delays in decisions

What are the challenges associated with NRF?

- **Financial crunch**- 50% of the funding mechanism is dependent on private sector.
- While the participation of the private industry in the NRF is an important and welcome step, it is unclear how the government will raise Rs 36,000 crore from the industry.
- **Autonomy** - The top positions in the NRF board are reserved for members of the government, including the PM and the Ministers of Science, Technology and Education.
- **Time period** - Although the NRF draft mentions that the peer-review process will be completed within 6 months, releasing funds may take time, pending financial clearance.

What is the need of the hour?

- The time between applying for a research grant and receiving the money must be minimal, preferably *within 6 months*.
- All the paperwork must be *digitally processed* without sending stacks of papers in hard copies to the NRF.
- All finance-related queries, paperwork, approval, and acceptance need to be between the NRF and the finance department of the university/research institution keeping the *scientist free to focus on research.*
- The NRF needs *explicit spending guidelines* away from the General Financial Rules (GFR) and the government's e-Marketplace (GeM) usage.
- Although the NRF draft mentions *timely disbursal of funds*, a mechanism needs to be in place to facilitate and implement this.

Department of Science and Technology
• Estblished in 1971. • Functions under the Ministry of Science and Technology. • Its flagship programs are National Initiative for Developing and Harnessing Innovations (NIDHI), Vigyan Jyoti, INSPIRE etc.,

References

1. The Indian Express | centre gets nod
2. The Indian Express | views on NRF
3. Indian Express |boost research

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