Science for Society **Science for Man** **Science in Thinking**

BREAKTHROUGH SCIENCE SOCIETY

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Registration No. S/86180 of 1996-97 under the West Bengal Societies Registration Act, 1961

A Voluntary Organization Committed to the Cause of Science, Culture and Scientific Outlook

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National Research Foundation – will it really benefit research in India?

It has been reported that the Union Cabinet has approved the introduction of the National Research Foundation (NRF) Bill, 2023, as per the recommendation of the National Education Policy (NEP) 2020. So far, there have been many governmental funding agencies, such as the Department of Science and Technology (DST), Department of Atomic Energy (DAE), Department of Bio-Technology (DBT), Indian Council of Agriculture Research (ICAR), Indian Council of Medical Research (ICMR), Indian Council of Historical Research (ICHR), and University Grants Commission (UGC), etc., in addition to individual ministries, which also used to support research in their subject areas. Now the NRF will be the principal source of research funding. Science & Engineering Research Board (SERB) will cease to exist and will be subsumed in the NRF. While DST, CSIR, DAE, etc., will continue to fund research institutes under their command, the NRF will become the primary agency to decide on and support individual scientists' research proposals.

This is a plan for centralization of research support. So far, a researcher had several options in submitting a research proposal. If a proposal gets rejected by one funding agency, it still stands a chance of getting supported by another. Centralization of research funding eliminates that possibility.

Most funding agencies identify specific 'Thrust Areas', and research proposals coming within the scope of a thrust area have a higher probability of getting funded. In this setting, curiosity-driven research – the success of which cannot be predicted in advance – has little chance of being supported. Still, the possibility of obtaining research funds was relatively higher with several funding agencies, each with its own list of thrust areas. But with a single window for supporting individual project proposals, such scope will be very restricted. Hard-hit will be research in the social sciences and those areas of natural sciences with no short-term industrial spin-off.

In a press conference, S&T Minister Jitendra Singh indicated that a sum of Rs. 50,000 crore will be spent on the NRF over the next five years (2023-28). At first glance, this sum of money may appear significant. However, notice that this is *not* the planned governmental outlay for research. In the press conference, the minister also stated that Rs. 36,000 crore is expected to come from the private sector. Thus, the government is envisaging spending only around Rs. 14,000 crores over five years, i.e., around 2,800 crores per year. Anybody with some idea of the volume of research conducted in India knows that this amount is sorely insufficient even to maintain the present meagre level of support.

To put things in perspective, recall that in the financial year 2022-23, the budget allocated to the Ministry of Science & Technology was Rs. 16,361 crores, out of which the Department of Science &

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Technology (DST) was allocated Rs. 7931.05 Cr, the Department of Biotechnology (DBT) Rs. 2683.86 Cr, and the Dept. of Scientific & Industrial Research (DSIR) Rs. 5746.51 Cr. Notice that all these amounts are much larger than the projected governmental annual spending on NRF.

Unlike advanced countries in America and Europe, private funding of scientific research in India has been meagre – despite significant efforts put in by the administrators of academic institutions. Barring a few laudable exceptions, the Indian corporate sector generally lacks the long-term vision required for supporting research which may yield tangible benefits decades later. In this scenario, banking on the corporate sector to pitch in with a sum exceeding government commitment is a wild dream. What will effectively happen is that the centralized research-funding system will lack the resources to foster research effectively. The small amount that the industry will contribute will only support translational research with short-term goals, and the focus of the whole NRF will turn to that.

What about the governance of NRF? NEP-2020 (article 17.10) promised that "The NRF will be governed, independently of the government, by a rotating Board of Governors consisting of the very best researchers and innovators across fields." But the Union Cabinet decision states that its Governing Board will be Presided over by the Prime Minister of India, and the Union Minister of Science & Technology and the Union Minister of Education will be the ex-officio Vice-Presidents. Even the Executive Committee, which will govern the day-to-day functioning of the NRF, is to be headed by a government-appointed person (the Principal Scientific Advisor). Hence the NRF is *not* envisioned to function independently of the government.

The government press release said that the NRF is meant to provide “high-level strategic direction” to scientific research in the country. We have seen that, over the past few years, the government's strategic direction has been promoting research in belief-based ideas like panch-gavya, and the so-called ‘Indian Knowledge Systems’. The claims by important government functionaries, like the existence of aeroplanes, the internet, television, stem cell research, genetic engineering and plastic surgery thousands of years back – cannot but make scientists apprehensive of the future direction and fate of science research under an NRF with such political leaders at its helm.

The Breakthrough Science Society protests against this plan of destabilizing the existing research-support system and demands that governmental support for research be increased to at least 3% of the country's GDP.

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