GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENCE AND TECHNOLOGY LOK SABHA

UNSTARRED QUESTION NO. 2767 ANSWERED ON 17/12/2025

NATIONAL MISSION TO PROMOTE INNOVATION, RESEARCH AND TECHNOLOGICAL DEVELOPMENT

†2767. SHRI VIRENDRA SINGH:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) whether the Government is running a dedicated national mission to promote innovation, research and technological development among youth and if so, the details thereof;
- (b) whether innovation labs are being established in schools, colleges and rural areas through the Atal Innovation Mission, Startup India, or other schemes and if so, the details thereof;
- (c) whether the benefits of these efforts are effectively reaching remote areas of the country and if so, the details thereof; and
- (d) whether the Government has launched any special grant or fellowship schemes to provide financial support to young researchers and if so, the details thereof?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND EARTH SCIENCES (DR. JITENDRA SINGH)

(a) Government has implemented various missions to promote innovation, research, entrepreneurship and technological development among youth, young researchers, scientists, academicians in the country.

The Government has launched the Research Development and Innovation (RDI) scheme to support cutting edge technology, deep-tech projects and startups. The main objectives of the RDI scheme are to encourage the private sector to scale up research, development and innovation, finance transformative projects, support acquisition of technologies which are critical or of high strategic importance and facilitate setting up of Deep-Tech Fund of Funds. The scheme is led by the Department of Science & Technology (DST) as the nodal department. With an outlay of Rs. 1 lakh crore in next 6 years, the RDI scheme targets sunrise sectors including energy security and transition, and climate action; deep-technology including quantum computing, robotics and space; artificial intelligence and its application in agriculture, health and

education; biotechnology, biomanufacturing, synthetic biology, pharma, medical devices; and digital economy including digital agriculture.

The DST is implementing the National Quantum Mission (NQM) with an outlay of ₹6003.65 crore for a period of eight years. Under the Mission, four Thematic Hubs (T-Hubs) have been established located at IISc Bengaluru (Quantum Computing), IIT Madras in association with C-DoT (Quantum Communication), IIT Bombay (Quantum Sensing & Metrology) and IIT Delhi (Quantum Materials & Devices). The T-Hubs support technology development, human resource development, entrepreneurship and industry collaboration and international collaboration through 14 Technical Groups and 17 Project Teams. Entrepreneurship and industry engagement are integral components of NQM. DST has issued dedicated guidelines to support quantum start-ups through funding, access to facilities and mentorship. Seven start-ups have been supported so far, with a rolling Call for Proposals to further strengthen the quantum ecosystem.

The DST is implementing the National Mission on Interdisciplinary Cyber Physical Systems (NM-ICPS), which was approved by the Union Cabinet with an outlay of Rs. 3660 Cr. Under this mission, 25 Technology Innovation Hubs (TIHs) have been established in reputed academic institutions across the country. Each TIH specializes in advanced technology domains such as Artificial Intelligence (AI) & Machine Learning (ML), Robotics, Internet of Things (IoT), Cybersecurity, Quantum Technologies, FinTech, etc. More than 800 Startups have been benefitted under the mission.

The DST through 'NIDHI' (National Initiative for Developing and Harnessing Innovations) program has extended end-to-end startup support to nurture startups from ideation to commercialization. It includes a variety of program components for Startups like PRAYAS (PRomoting and Accelerating Young and ASpiring technology entrepreneurs) - prototyping grant for early-stage innovative ideas, hand-holding support to startups through Technology Business Incubators, seed funding and acceleration support for rapid scaling of startup businesses.

The Anusandhan National Research Foundation (ANRF) under DST has been able to strengthen Industry-Academia linkages through their various programs. One of the key mechanisms adopted to bridge the gap between academic research and market-appropriate products is the structured support across Technology Readiness Levels (TRLs). Under the new framework, ANRF is supporting research from basic and early-stage development, i.e. up to TRL-4, while the RDI scheme is mandated to support projects from TRL-4 and above, to advance prototypes, pilot demonstrations, and scale-up activities. This coordinated approach enables a smooth transition from laboratory research to commercially deployable technologies.

Atal Innovation Mission (AIM), a flagship initiative setup in 2016 to promote a culture of innovation and entrepreneurship in the country. The AIM has taken a holistic approach to ensure creation of a problem-solving innovative mindset in schools and creating an ecosystem of entrepreneurship in universities, research institutions, private and MSME sector.

Moreover, the Government has also recently approved major national programmes such as the India Al Mission and Centres of Excellence in Al, further strengthening the innovation and emerging technology ecosystem alongside DST's missions.

(b) to (c): AIM has launched the Atal Tinkering Lab (ATL) program. ATL is a state-of-the-art space established in a school with a goal to foster curiosity and innovation in young minds, between grade 6th to 12th across the country through advanced tools and technologies such as Internet of Things, 3D printing, rapid prototyping tools, robotics, miniaturized electronics, do-it-yourself kits and many more. The aim is to stimulate a problem-solving innovative mindset within the children of the ATL and nearby communities. Till date, AIM has established 10,000 Atal Tinkering Labs in schools across the country.

Atal Incubation Centres (AICs) - business incubators have been established by the AIM at universities, institutions and corporates to promote innovation and entrepreneurship among young innovators of the country. These Atal Incubation Centres aim to foster world-class innovation and support dynamic entrepreneurs, who want to build scalable and sustainable enterprises. The AIM has successfully operationalized 72 AICs across India. These AIC enable startups by providing technical facilities, resource-based support, mentorship, funding support, partnerships and networking, co-working spaces and lab facilities among others.

Around 56% of ATLs are located in rural areas, and over 1,175 ATLs have been established in Aspirational Districts, ensuring that innovation access reaches underserved and remote regions. Lakhs of students have engaged in ATL-based innovation activities nationwide, which clearly showcase high utilisation and impact of these facilities in both urban and rural areas.

Under NIDHI Technology Business Incubator (NIDHI TBI) program, TBIs are established in premier academic institutions for providing incubation support to the early-stage startups. The support to these startups is provided in terms of technical and business mentoring, intellectual property rights, legal, regulatory, funding, etc. Under the NIDHI Inclusive Technology Business Incubator (NIDHI iTBI) program, iTBIs have been established in the academic institutions in tier-2 and tier-

3 cities to increase inclusivity of entrepreneurship ecosystem across the country. Since inception 85 NIDHI TBIs / iTBIs have been established.

(d) The Government has launched several schemes to provide financial support to young researchers across the country. Under the INSPIRE (Innovation in Science Pursuit for Inspired Research) programme of DST, support is provided at multiple levels to attract and retain talented youth in science and strengthen the national R&D base.

The INSPIRE Fellowship is offered to students who secure 1st Rank in university-level examinations in Basic & Applied Sciences, Engineering, Medicine, Agriculture and Veterinary Sciences, as well as to INSPIRE Scholars who obtain at least 70% marks at the M.Sc. level and are admitted to recognised PhD programmes. The Fellowship is tenable for a maximum of five years (two years as JRF and three years as SRF). INSPIRE Fellows receive Rs. 37,000/- per month + admissible HRA and Rs. 20,000/- annual contingency during JRF, and Rs. 42,000/- per month + admissible HRA and Rs. 20,000/- annual contingency during SRF.

The INSPIRE Faculty Fellowship provides opportunities to post-doctoral researchers in the age group of 27–32 years (with relaxations for SC/ST/Women and benchmark disability categories). Each Faculty Fellow receives Rs. 1,25,000/- per month with an annual increment of Rs. 2,000/- along with a research grant of Rs. 35 lakh over five years to establish an independent research programme.

During the period 2022–23 to 2025–26 (as on November 2025), a total of 11,726 INSPIRE Fellows and 1,172 INSPIRE Faculty Fellows have benefited under the scheme, with an expenditure of over Rs. 730.76 crore, which reflects sustained Government investment in building India's young scientific workforce.

The ANRF also supports young researchers through competitive grants, post-doctoral funding, research career initiation grants, and programmes aimed at strengthening research ecosystems across universities and institutions. The Prime Minister's Early Career Research Grant (PM-ECRG) provides flexible research funding of up to Rs. 60 lakh for a period of three years to support early-career investigators. The ANRF National Post-Doctoral Fellowship (N-PDF) provides Rs. 80,000/- per month (Rs. 50,000 per month for candidates who have submitted their Ph.D. thesis and are awaiting the degree) along with research contingency and applicable HRA for a tenure of up to two years. ANRF also implements Inclusivity Research Grants (IRG) to provide dedicated financial support to researchers belonging to Scheduled Castes and Scheduled Tribes to undertake research in frontier areas
