GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENCE AND TECHNOLOGY LOK SABHA UNSTARRED QUESTION No. 2025 TO BE ANSWERED ON 12/02/2021

Setting up of NSTEDB

2025. SHRI GAUTHAM SIGAMANI PON: SHRI GAJANAN KIRTIKAR: SHRI SELVAM G.: SHRI C.N. ANNADURAI: SHRI DHANUSH M. KUMAR:

Will the Minister of SCIENCE AND TECHNOLOGY विज्ञान और प्रौद्योगिकी मंत्री be pleased to state:

(a) the objective of setting up 'National Science and Technology Entrepreneurship Development Board'(NSTEDB) in the country;

(b) the details of achievements made by NSTEDB since its inception;

(c) whether the Government has made any assessment of the functioning and performance of NSTEDB, if so, the outcome of the assessment;

(d) the details of training programmes conducted by the Board under various programmes during the last three years;

(e) whether some outside agencies have been engaged for conducting the training programmes, if so, the details thereof along with the criteria adopted for engaging such agencies; and

(f) the other steps taken by the NSTEDB to help promote knowledge driven and technology intensive enterprises?

ANSWER

MINISTER OF HEALTH AND FAMILY WELFARE; MINISTER OF SCIENCE AND TECHNOLOGY; AND MINISTER OF EARTH SCIENCES

(DR. HARSH VARDHAN)

स्वास्थ्य और परिवार कल्याण मंत्री, विज्ञान और प्रौदयोगिकी मंत्री और पृथ्वी विज्ञान मंत्री

(डॉ .हर्ष वर्धन)

(a) The objectives of setting up of National Science & Technology Entrepreneurship Development Board (NSTEDB)are mentioned below:

- 1. To act as a policy advisory body to the Government in matters relating to S&T Entrepreneurship Development.
- 2. To guide the Department in implementation, monitoring and evaluation of Schemes/programmes related to Innovation and Entrepreneurship.
- 3. To guide in generating new programmes/schemes.

(b) Since inception, NSTEDB has made pioneering efforts to foster the Entrepreneurship Ecosystem in the country. NSTEDB is one of the first government agencies to promote institutional mechanisms to support technology based entrepreneurship in the country through speed, scale and skills. Under its National Initiative for Developing and Harnessing Innovations (NIDHI) umbrella program, NSTEDB has aligned its programs with Startup India initiative. In the last 5 years, the number of Technology Business Incubators (TBI) established has doubled and have now reached more than 150 TBIs. NSTEDB has enabled Innovation Ecosystem Policy Frameworks like: Service Tax exemption to both incubators and incubates (year 2007), Permission to hold equity in incubatees by DST recognized incubators (year 2007), CSR Funding for incubators (year 2014).

NSTEDB has pioneered Innovative Partnership Models leveraging the strengths of diverse stakeholders by programs in PPP mode for scouting & supporting innovation. NSTEDB backed TBI's were one of the first incubators to get support from (multilateral) international developmental agencies. NSTEDB was first to initiate supporting accelerator programs (year 2016) through TBIs to accelerate growth-stage companies at the post incubation stage. So far, NSTEDB has supported 417 startup companies through its 27 accelerator programs conducted at various Technology Business Incubators (TBI) across the nation. TBIs supported with NIDHI-PRAYAS Program under which 401 innovators have been supported in last 5 years. NSTEDB pioneered initiating NIDHI Entrepreneurs-in-Residence (EIR) fellowship to support aspiring entrepreneurs. So far, 221 EIR fellowships have been extended through TBIs.

According to a latest study conducted during 2014-2019 through Indian Institute of Technology, Kanpur, on NSTEDB programs, the total turnover of both the graduated and incubated startups at NSTEDB supported TBIs is in excess of ₹27,000 Crore.

(c) Government has made assessments on the performance of the National Science and technology Entrepreneurship Board (NSTEDB) which was setup in 1982 in the Department of Science and Technology. The chronological details of the assessments carried out on the performance of NSTEDB are given below:

- **1. 1988:** The report of the Evaluation Committee, chaired by Shri T.N. Seshan to study the working of NSTEDB in 1988. Major outcomes of the report are:
 - i. NSTEDB must continue to function in DST
 - ii. There is a need for an exclusive Board to promote entrepreneurship among science and technology persons.
 - iii. Adequate staff and funds must be provided to the NSTEDB in order that it may fulfill its objective in a much better fashion than heretofore. At the moment the activity is subcritical.
- 2. 1998: Report of the Evaluation Study of NSTEDB performance and their impact on Entrepreneurship Technology Development, Employment, Technology Transfer by National Council of Applied Economic Research, 1998. Major recommendations of the report are given below.
 - i. Social cost benefit analysis reveals a high social yield (social IRR) while enhancing the role of private sector.
 - ii. Given the size of the problem for which NSTEDB has been set up to tackle, there appears a need for NSTEDB to enhance and expand its catalytic role.
 - iii. Strategic planning and organization to access funds outside of government and enhance visibility and impact through improved delivery systems.
 - iv. Introduce project orientation and management for success of the programmes.

- v. To fine tune the programs on knowledge and awareness spread, incubation and support facilities for entrepreneurs with S&T orientation and group employment schemes.
- vi. To increase the coverage of NSTEDB schemes across the country and harness the power of information technology in spreading entrepreneurship awareness.
- **3.** 2013: Evaluation of NSTEDB performance and achievement during XI plan by a committee chaired by Prof. S. K. Joshi, 2013. Major recommendations of the committee are given below.
 - i. NSTEDB to disengage from skill development activities especially in the wake of science development mission and a corporation to implement the mission.
 - ii. NSTEDB to continue all the other ongoing programmes on innovation. Entrepreneurship and incubation development.
 - iii. NSTEDB to expand the Technology Business Incubator (TBI) network substantially in the country through competitive support model, participation of the State Governments and appropriate Public-Public and Public-Private partnerships.
 - iv. A new program on innovation –Science & Technology Entrepreneurship Development (i-STED) to address the challenges associated with a specific region/industry/cluster by connecting interventions of S&T and innovative solutions with entrepreneurial opportunities to be initiated.
- 4. 2020: The assessment of National Science and technology Development Board (NSTEDB) efforts more specifically during last 5 years i.e. (2014-19) in promoting innovation and entrepreneurship was carried out by Indian Institute of Technology, Kanpur (IIT Kanpur). The outcomes of the impact report for the assessment, published on 8thSeptember, 2020 are given below:
 - i. Board's role has been critical in nurturing and sustaining the nation's entrepreneurial ecosystem.
 - ii. The constant innovative approach and effort adopted by the DST team and other stakeholders in successfully navigating the pitfalls in this journey are noteworthy and deserves high appreciation.
 - iii. As on 31st March 2020 there are 153 Incubators, with a total of 3681 Incubatees across the country, while 113 Incubatees are acquired by third parties.
 - iv. The continuation of NSTEDB's programs in this direction leveraging its strengths built over time is critical to position India on the global Economic map with economic, social and technology disruptions in both domestic and global market space, this is also evident given its accelerated pace of interventions in the last 5 years.
 - v. Learning from the insights derived from last five years analysis, coupled with pandemic's learnings, the report concluded that NSTEDB has a greater potential to contribute and deliver to fulfill the national aspirations under Startup India, Atmanirbhar India with more empowered innovators, start-ups and incubators.
- (d) Board has conducted the following 5 training programs during the last 3 years:

(1) Entrepreneurship Awareness Camp (EAC): Duration -3 Days. Objective: To sensitize and inculcate the seed of S&T entrepreneurship amongst youth.

(2) Entrepreneurship Development Programme (EDP):Duration-4 Weeks. Objective: Capacity Building programme of potential entrepreneurs for setting up S&T based enterprises.

(3) Women Entrepreneurship Development Programme (WEDP): Duration-4 Weeks. Objective: To motivate and encourage potential women entrepreneurs having S & T background for new enterprise creation.

(4) Technology based Entrepreneurship Development Programme (TEDP): Duration-6 Weeks. Objective: Training programme for potential entrepreneurs having S&T background to promote technology led/ R & D based enterprises. (5) Faculty Development Programme (FDP): Duration-2 Weeks. Objective: To train and enhance the supply of competent faculty / resource persons for teaching and training entrepreneurship on PAN India basis.

(e) Various academic / engineering organization/ agencies were engaged for conducting the training programmes, and training programme conducting agencies were selected on the basis of following 5 Criteria:

- i. Experience and expertise in conducting such training programmes
- ii. In-house capacity and capabilities of the institution/organisation
- iii. Resources available for conducting training programmes
- iv. Commitment of the organisation/institution
- v. Track record of conducting similar activities in the past.

The list of selected agencies may please be seen from NSTEDB website URL: http://www.nstedb.com/AgenciesEngagedforconducting

InnovationandEntrepreneurshipTrainingPrograminthecountry.pdf

(f) **NSTEDB** has taken the following steps to help promote knowledge driven and technology intensive enterprises:

(1) Established incubators at various Higher Education Institutions (HEIs)of the country for the incubation of the innovative products.

(2) **P**roviding Seed support to the innovators and startups for making the technologies commercially viable.

(3) Providing the monthly fellowship to the entrepreneurs through its programme of Entrepreneurs in Residence (EIR).

(4) Providing Promoting and Accelerating Young and Aspiring Technology Entrepreneurs (PRAYAS) prototype grant to each Idea for nurturing it in to commercial viable product by leveraging technology infrastructure, technical guidance and mentorship to innovators.

(5) Enabled productization of ideas by young entrepreneurs in various domains like agritech, edutech, fintech, medtech, artificial intelligence, machine learning, robotics, sanitation etc. Some of the innovative products recently developed by Start-ups promoted by NSTEDB programs are: Ergonomic toilet with an elevated footrest, non-invasive screening and detection of oral cancer, Water-saving RO filters, In-space propulsion systems & orbital launch vehicles, IoT enabled automated smart cradle, etc.

(6) In addition Department has taken a specific initiative CAWACH [Centre for Augmenting WAR with COVID-19 Health Crisis], through a Technology Business Incubator (TBI) set up by this Department. The initiative was launched in March end 2020. It supported 51 innovative startups with market ready solution in five thematic areas:

- i. Diagnostics, drugs & vaccines
- ii. Informatics
- iii. Disinfectants & Sterilizers
- iv. Ventilators & Other Medical Equipment
- v. Personal Protective Equipment (PPE)

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