

**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO.4374
TO BE ANSWERED ON 19/7/2019**

PROMOTION OF SCIENTIFIC KNOWLEDGE

4374. SHRI B.Y. RAGHAVENDRA:

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

- (a) the details of schemes introduced by the Science and Technology department during the last three years;
- (b) whether the Government has sanctioned any scheme for Karnataka in order to promote scientific knowledge among young children in the country;
- (c) if so, the details thereof, scheme and year-wise; and
- (d) the total funds sanctioned and released under the said schemes in the State of Karnataka during the said period?

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 प्रौद्योगिकी मंत्री; और पृथ्वी विज्ञान मंत्री

डॉ. हर्ष वर्धन

- (a) Following are the details of the schemes introduced by Department of Science & Technology during the last three years:
- i. DST is implementing INSPIRE Awards MANAK (Million Minds Augmenting National Aspiration and Knowledge) programme since year 2016 for school children in the age group of 10-15 years and studying in Class 6th -10th to promote research and innovation among them. The programme targets about ten (10.0) lakh ideas from more than five (05) lakh middle and high schools across the country in a Financial Year and out of which one (1.0) lakh ideas are to be shortlisted for an initial award of Rs. 10000/- for preparation of project/ model/ showcasing of idea and participation in the District Level Exhibition & Project Competition (DLEPC). From DLEPC's, best ten thousand projects (10000) are to be selected for participation in the State Level Exhibitions & Project Competitions (SLEPC) and among SLEPC participants top one thousand (1000) projects are to be selected for National Level Exhibition & Project Competition (NLEPC).
 - ii. In 2016-17, a new programme namely "Mobility" has been launched under knowledge Involvement in Research Advancement through Nurturing (KIRAN) to address relocation issues of Women Scientists working in regular position in Government Organizations. The Mobility Scheme is aimed to provide an opportunity to women scientists who are facing difficulties in their present job due to relocation (marriage, transfer of husband to any other location within the country, attending ailing parents, and accompanying children studying in different city) and intends to act as a filler while searching other career options at a new place. The initiative intends to provide a harmonious environment during early phases of women scientists where they would like to stay active in research in addition to attending and fulfilling other responsibilities in the domestic front. It offers a contractual research award to women scientists and enables them for independent research.
 - iii. National Initiative for Developing and Harnessing Innovations (NIDHI) is an umbrella programme conceived and developed by Department of Science & Technology in the year 2016 with an objective to nurture ideas and innovations (knowledge-based and technology-driven) into successful startups, resulting in socio economic development through wealth and job creation. NIDHI aims to nurture start-

- ups through scouting, supporting and scaling of innovations. It offers funding support to convert an idea into a prototype through PRAYAS programme, fellowships for potential entrepreneurs through Entrepreneur in Residence program, an institutional program to incubate startups through Technology Business Incubators hosted at various academic institutes, seed funding and acceleration support to startups and creating Centre of excellences for innovation and incubation.
- iv. During 2017, Science and Heritage Research Initiative (SHRI) programme was launched with the aim to promote the scientific research and intervention to preserve, restore and development of new material/methods/tools to strengthen Heritage Science in sectors such as textiles, metal works, crafts, ceramics etc. and diffuse this to artisan clusters.
 - v. In 2017-18, DST launched 'Indo-US Fellowship for Women in STEMM' (Science, Technology, Engineering, Mathematics & Medicine) to provide opportunities to Indian Women Scientists, Engineers & Technologists to undertake International collaborative research in premier institutions in USA for duration of 3-6 months, to enhance their research capacities and capabilities. The Indian Women Scientists within the age bracket of 21 to 50 years are eligible for this fellowship.
 - vi. AWSAR (Augmented Writing Skills for Articulating Research) was launched during FY 2018-19 in order to create and strengthen the ecosystem of science communication. The programme aims to reduce the gap that exists in the area of communicating R&D activities being pursued by Academic Institutions/Universities to lay-man. Young researchers pursuing Ph.D and Postdoctoral activities are encouraged to write about their research work in the form of a story. The best stories received are to be showcased in the form of an edited e-book/compendium.
 - vii. A Science Channel (DD Science) was launched during 2018-19 with the aim of easy access to science media programmes for masses. It is Implemented through Vigyan Prasar (VP) and Doordarshan, Prasar Bharati, through DTH & Internet TV. DD Science is being telecast for one hour (5 to 6 PM) six days a week (Monday to Saturday) on the national channel both in Hindi & English. Science, Technology & Innovation (STI) related dissemination, scientific awareness and demystification especially with Indian perspectives, ethos and cultural milieu, and Doordarshan's highest penetration in smaller towns/rural area and additional footprint on DTH would leverage the outreach to more than 150 million people. India Science (www.indiascience.in) Channel both in Hindi and English, is a 24X7 TV Channel-available through internet. An India Science Mobile App, downloaded from Google Play Store or Apple Store has also been developed.
 - viii. During the year 2018-19, DST has initiated a National Mission on Interdisciplinary Cyber Physical Systems (NM-ICPS) with the aim of technology development in the areas like Artificial Intelligence, Robotics, Sensors, Big Data Analytics, geographical information systems, advanced materials, etc. in complete convergence with all stakeholders by establishing strong linkages between academia, industry, Government and International Organizations.

(b) & (c): No Sir. Department of Science and Technology has not sanctioned any scheme to promote scientific knowledge among young children specifically for Karnataka. However, following programmes are being implemented by the department for promotion of scientific knowledge among young children in the country including Karnataka:

- i. INSPIRE Internship programme launched during 2008 is being implemented for promotion of scientific knowledge. The programme arranges Science Camps for about 50000 children of class XI and XII each year who are within top 1% of Class 10th board examinations, to enable them to interact with leading researchers and scientists including Nobel Laureates for experiencing the joys of innovation. So far, more than 1911 INSPIRE Internship Camps have been organized across the Nation, including in Karnataka, and about 3.85 lakh students in the age group of 16-17 years have availed this opportunity.
- ii. To build awareness about Interdisciplinary Cyber Physical System (ICPS), at School level, 100 Government Schools were identified in the two Aspirational Districts (namely Yadgir and Raichur) in Karnataka State. This includes Training of 2 teachers from respective school (One Science teacher & HM from Middle School or One HM from Primary School in same campus).
- iii. The Children's Science Congress is a programme for children of the age group of 10-17 years to encourage them to learn science by doing projects.
- iv. Under INSPIRE MANAK awards, total 10,742 awards have been sanctioned to selected students in state of Karnataka during last three years

(d) A total of Rs.10.902 Cr has been sanctioned during last three years for promotion of scientific knowledge in the State of Karnataka.
