

**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO.1817
TO BE ANSWERED ON 26/07/2017**

INFORMATION RELATED TO SCIENCE TO THE RURAL CHILDREN

†1817. SHRI NAGAR RODMAL:

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

- (a) the steps taken by the Government to provide information related to science to the rural children; and
- (b) if so, the details thereof and if not, the reasons therefor?

ANSWER

**MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES
(SHRI Y.S. CHOWDHARY)**

विज्ञान और प्रौद्योगिकी मंत्रालय में राज्य मंत्री और पृथ्वी विज्ञान मंत्रालय में राज्य मंत्री

(श्री वाई. एस. चौधरी)

- (a) Government of India, has taken many steps to popularize science and provide information about science across India including rural children in the country.
- (b) The Department of Science & Technology (DST) has used several mechanisms and has launched numerous schemes, programmes and projects across the entire length and breadth of the country to popularize science. Some of the major initiatives undertaken are given as follows:
- (i) **Science Express:** To spread awareness about science amongst masses, particularly children from rural places, DST has been playing an active role through one of the flagship initiatives called Science Express. Science Express is an innovative science exhibition mounted on a custom-built 16 coach AC train which has been travelling across the country since its flag off on October 2007. It has successfully completed 8 phases of journey which included 4 phases as 'Science Express', 3 phases as 'Biodiversity Special' and another as 'Climate Action Special'. Over 300 innovative, interesting, informative exhibits have been mounted on-board to make learning fun-filled for the visitors to this unique train which comprise mostly of school students & teachers. Children are also encouraged to participate in activities, games, quizzes, competitions, etc. through which they easily understand fundamental concepts of Science and Mathematics. Science Express also has complementary activities which are conducted in its 'Kids Zone', 'Joy-of-Science Lab', and through events on railway platforms and outreach in schools located nearby. To facilitate this, a team of trained communicators stays on-board during the run of 6-7 months in each phase. For those schools/institutions that are not able to visit the exhibition train, the on-board team of Science Communicators conduct Outreach Activities, located in the vicinity of the Railway Station where it is parked. This one-of-its-kind mobile exhibition completed 8 tours across India in May 2016 and the 9th

phase, which was launched in February 2017, is in progress. Thus far, this train has travelled more than 1,52,000 km across the length & breadth of the country on the Broad-gauge network of Indian Railway covering over 510 locations and attracting 1.72 crore visitors.

- (ii) **National Children's Science Congress (NCSC)**: NCSC was launched in 1992 to encourage and engage school students in the age group 10–17 years in identifying various challenges in their localities/communities and find possible science and technology (S&T) solutions. Each year, about 500,000 rural & urban students participate at the District level competitions across the country. The selected projects/models are then evaluated at the State level and further at the National level. The winners of the national competitions are now also getting a chance to participate at the International level. In 2017, in the Silver Jubilee year of NCSC, it is the endeavour of DST to engage school students from almost all the districts of the country to participate in this exciting programme. In addition, Initiative for Research and Innovation in Science (IRIS) of DST aligns with National Level Mega Science Competitions. In 2013, IRIS also has attracted lateral entry from winners of many other national competitions and fairs like NCSC, Science Fair by National Council of Science Museums (NCSM), Jawaharlal Nehru Science Fair by National Council of Educational Research & Training (NCERT) and Central Board of Secondary Education (CBSE). Such an alignment has turned IRIS into a truly global initiative.
- (iii) **India International Science Festival (IISF)**: IISF is a mega event supported by Ministry of Science and Technology and Ministry of Earth Sciences in association with Vijnana Bharati which was successfully held in New Delhi for the second successive year in 2016. Council for Scientific and Industrial Research (CSIR) was the nodal organization and the venue was National Physical Laboratory (NPL). IISF 2016 saw a conglomeration of different scientific components, with a focus on students and the young scientists, like Science Village (3000 school students from rural background across the country), Young Scientist Conference (with 3000 scientists from various R&D institutions, Mega Science Expo with the participation of all the scientific and R&D institutions across India, India International Science Film Festival, INSPIRE- student innovative projects, NGO Conclave, Unnat Bharat pavilion and so on.
- (iv) **Science Exhibition & Fairs**: Science exhibition and Fairs are amongst the most important activities to create and enhance scientific awareness of children especially rural children; teachers, parents, peoples' representative and common man. Science, Technology, Engineering and Mathematics (STEM) demonstrations under this component of DST comprise of Science Fairs, *Melas*, static exhibitions, mobile science exhibitions, lecture-demonstrations, interactive media, visits to S&T establishments, hands-on-STEM activities, and so on. These events, whether stationary or mobile, serve to utilize the expertise of resource persons trained by DST in various activities. Different kinds of demonstration are being taken up on a variety of themes like environment, health, science behind miracles, vermin composting, etc. Science in toys, Puppetry, activity stalls where children solve a puzzle or do mathematical games/ activities, ask a good question, design/redesign, spot-the-odd one, draw a future, quizzes, painting and skits and street plays, expose them to science in daily life. These serve to expose students to the scientific concepts and motivate them to take up a career in science. Over 200 Science fair/Science exhibitions were held in almost all the States in the country in last 3-4 years. More than 6 lakhs students & teachers and 20 lakhs general public got benefited.

National Council of Science Museum (NCSM) in the Ministry of Culture also organizes Science & Engineering Fair, Innovation Festivals and Mobile Science Exhibition Programme. 24 exhibition buses in which well-designed science exhibits have been mounted are regularly traveling in Rural areas specially focused on rural students with an objective to popularize science in rural & urban areas for the benefit of students and common man. In addition, NCSM organizes various educational activities *viz.* science exhibitions, science seminars, science camps, popular science lectures, etc. through its chain of 25 Science Museums, Science Centers, Planetaria, etc. spread across the country.
