GOVERNMENT OF INDIA MINISTRY OF EDUCATION DEPARTMENT OF HIGHER EDUCATION

LOK SABHA UNSTARRED QUESTION NO. 2417

ANSWERED ON 18th December, 2023

STEM Role in Women Empowerment

2417. MS. DEBASREE CHAUDHURI:

Will the Minister of EDUCATION be pleased to state:

- (a) whether the Government is aware that Science, Technology, Engineering and Mathematics (STEM) education can play a significant role in women's empowerment and can transform gender norms, accelerate and smoothen their transition between education and technical jobs; and
- (b) if so, the details of steps proposed to be taken by Government keeping in view that Government Educational Institutions, parents, as well as companies, need to view gender-responsive STEM as a promising educational approach, integral to quality learning and women empowerment?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF EDUCATION (DR. SUBHAS SARKAR)

(a) & (b): Education falls under the concurrent list and thus, both Central and State Government take various initiatives to ensure quality higher education in the country. To promote female students to pursue higher education and research, All India Council for Technical Education (AICTE) has introduced Pragati Scholarship and TechSaksham Program (TSP) for women. The Pragati Scholarship was started in the year 2014 to award scholarship to meritorious girl students to encourage them to pursue higher technical education. AICTE is awarding 10000 scholarships (Pragati) every year to the girls entering in the technical education. TechSaksham Program is a top-up program that uses experiential learning to develop employability skills amongst underserved female students pursuing higher technical education.

With a view to improve female enrolment in the Undergraduate Programmes in Indian Institutes of Technology (IITs) and National Institutes of Technology (NITs), supernumerary seats were created which increased the female enrolment from 8% in 2018-19 to 20% in 2020-21.

Other Ministries/ Departments like the Department of Biotechnology, has initiated a special programme namely the Biotechnology Career Advancement and Re-orientation Programme (BioCARe) to promote and support women in science which aims at providing support to Doctoral and Post-doctoral research project grants to women scientists. The Department of

Science and Technology is empowering women in STEM fields through its umbrella scheme 'Women in Science and Engineering-KIRAN (WISE-KIRAN)'. The Vigyan Jyoti programme under the WISE-KIRAN Scheme aims to encourage meritorious girls to pursue higher education and careers in STEM fields which have a lower representation of women. The Vigyan Jyoti Programme is being implemented since 2020 in 250 districts of the country and benefitted around 50000 girls of Class IX-XII. Apart from various STEM-related activities, parent-student counselling is part and parcel of the Vigyan Jyoti Programme, to sensitize parents about the importance and benefit of STEM education for girls as a better career perspective. The Navodaya Vidyalaya Samiti (NVS) is the implementing partner of this programme. Another programme, 'Gender Advancement for Transforming Institutions (GATI)', is also playing an important role, in sensitization of higher educational institutions to adopt a more gender-sensitive approach in STEM education and career to achieve gender equality.

With these and other measures, there has been consistent improvement in the enrolment of female students in STEM Courses. As per All India Survey on Higher Education (AISHE), the number of Female students enrolled in STEM Courses has increased from 35.14 Lakh in 2014-15 to 41.93 Lakh in 2021-22 (Provisional), which is a significant increase of 19.3%.
