

**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION No. 2977
ANSWERED ON 05/08/2026**

ENHANCE UTILITY AND EFFECTIVENESS OF R&D INSTITUTIONS

†2977. SHRI MANSUKHBHAI DHANJIBHAI VASAVA:

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

- (a) whether the Government-funded Research and Development (R&D) institutions and the scientific community are failing to cater the needs of the rural areas;**
- (b) if so, the details thereof; and**
- (c) the steps taken/being taken by the Government to enhance the utility and effectiveness of R&D institutions and the scientific community for the welfare and development of the rural areas in the country?**

ANSWER

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

(a) to (b): The Government-funded Research and Development (R&D) institutions and the scientific community are actually quite successful in playing a pivotal role in addressing national challenges by developing innovative technologies and science-led interventions across diverse sectors, catering to the needs of rural areas. The Government has taken various initiatives to translate scientific knowledge and technological innovations into affordable, accessible and locally relevant solutions for rural communities, contributing to improved livelihoods and inclusive socio-economic development.

(c) The Government has taken/is taking several measures to enhance the utility and effectiveness of R&D institutions and the scientific community for the welfare and development of rural areas. These include promoting mission-oriented research aligned with national priorities; strengthening translational research, innovation and technology transfer; encouraging industry-academia collaboration; supporting start-ups through Technology Business Incubators and innovation programmes; and promoting outreach and scientific awareness activities in rural and remote regions. The Scientific Social Responsibility (SSR) policy formulated by Department of Science and Technology (DST) further promotes research and development alignment with societal needs, bridging gaps between scientific community

in R&D institutions and rural communities. Several targeted initiatives were launched to align national R&D institutions with rural development goals, ensuring that scientific advancements directly improve village livelihoods. Some of the significant steps taken by the Ministry are given below:

- **By leveraging its network of laboratories, Council of Scientific & Industrial Research (CSIR) is utilizing the knowledgebase and technologies available in different institutes of CSIR for empowering different strata of society, especially the rural challenges through various projects, which enables deployment of relevant CSIR technologies in rural areas across the country for augmenting incomes and improving the quality of lives in the villages. CSIR is implementing various Mission Mode projects like Aroma Mission, Floriculture Mission, Smart Village Mission, Seaweed Mission, Millet Mission and Precision Agriculture Mission to bring transformative change through desired interventions in the areas of agriculture, processing and product development for fuelling the growth of agri-based industry and rural employment.**
- **The Department of Biotechnology (DBT) enhances R&D utility for rural welfare through targeted initiatives like the Biotech-KISAN scheme and Rural Bioresource Complexes. These programs connect labs directly with farmers to scale up field-tested technologies, improve crop and soil productivity, and build local bio-enterprises.**
- **The Department of Science and Technology (DST) has taken several steps to enhance the utility and effectiveness of its R&D institutions for rural development. The Autonomous Institutions of DST like SCTIMST Thiruvananthapuram, JNCASR Bengaluru, ARI Pune, IASST Guwahati and NECTAR Shillong have implemented multi-pronged strategies to align research and development with rural welfare. To bridge the lab-to-land gap, organizations like the National Innovation Foundation (NIF) actively scout and scale up grassroots innovations, converting local ideas into viable technology-backed products. The Science for Equity, Empowerment and Development (SEED) Division, DST funds location-specific, action-oriented R&D projects tailored for socio-economic upliftment. The Vigyan Dhara scheme integrated institutional capacity-building with direct technology deployment. The Inclusive Technology Business Incubators (iTbIs) set up in Tier-2 and Tier-3 regions support rural Startups and local entrepreneurs. Anusandhan National Research Foundation (ANRF) further accelerated the translation of lab-scale research into viable market-ready tools. These interventions successfully address critical rural needs and ensures that the scientific community directly bridges the rural-urban divide for the welfare and development of the rural areas in the country.**
