GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO. 4217
ANSWERED ON 18/03/2026

NATIONAL PROGRAMMES THROUGH DST, CSIR AND DBT

4217. SHRI VISHNU DATT SHARMA:

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

(a) whether the Government is implementing national programmes through Department of Science and Technology (DST), Council of Scientific and Industrial Research (CSIR) and Department of Biotechnology (DBT) to promote technology transfer, rural innovation, start-ups and science-driven livelihood generation across regions;

(b) whether any technology-demonstration projects, innovation hubs, biotech outreach programmes or CSIR/DST field initiatives have been undertaken in the districts of Katni, Panna and town of Khajuraho in Khajuraho Lok Sabha Constituency;

(c) the number of institutions, youth or farmer groups benefitting from such initiatives and the employment or enterprise outcomes achieved locally;

(d) if coverage remains limited in these districts, the reasons therefor and corrective steps taken; and

(e) the plan to extend science-based livelihood, incubation and technology-transfer support so that research outcomes translate into local economic growth and employment in this region?

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

(a) The Government of India has implemented a range of national programmes through the Department of Science and Technology (DST), Council of Scientific and Industrial Research (CSIR), and Department of Biotechnology (DBT) to strengthen the country's research and development (R&D) ecosystem, promote innovation and entrepreneurship, and facilitate the translation and dissemination of technologies across the nation. These initiatives focus on technology development, technology transfer, start-up promotion, promotion of rural innovation, and science-based livelihood generation, thereby contributing to inclusive and sustainable socio-economic development.

Department of Science and Technology (DST), through its entrepreneurship programs has extended end-to-end support to start-ups, nurturing them from the ideation stage to commercialization. The entrepreneurship programmes includes several components such as PRAYAS (Promoting and Accelerating Young and Aspiring Innovators & Startups) which provides prototyping grants to early-stage innovative ideas; hand-holding support to startups through a nationwide network of Technology Business Incubators (TBIs); seed funding to startups; and acceleration support to enable rapid scaling of start-up ventures.

DST has established Inclusive Technology Business Incubators (iTBIs) in Tier-2 and Tier-3 cities, particularly in regions lacking a well-developed innovation ecosystem. These incubators promote inclusive entrepreneurship with special focus on geographic diversity, women entrepreneurs, persons with special abilities, and marginalized communities.

DST has supported Technology Enabling Centres (TECs) in universities to promote industry-academia-government collaboration, thereby promoting technology transfer and strengthening the translational ecosystem, leading to regional innovation ecosystems and technological innovations.

DST, under its Science for Equity, Empowerment and Development (SEED) initiatives has supported variety of schemes/programmes for societal development by infusing S&T based interventions, delivery of location specific science-led solutions and appropriate technologies for creation and improvement of sustainable livelihoods. The programs are primarily for enabling disadvantaged sections of the society viz. SC/ST, Divyangjan, Elderly, Economically weaker sections, and Women, with efforts to reach out to the remote areas, rural and far-reaching corners of the Nation. Major programmes under the SEED initiative include Scheme for Young Scientists and Technologists (SYST), Technology Interventions for Disabled and Elderly (TIDE), Science & Technology for Women (STW), Strengthening, Upscaling & Nurturing Innovations for Livelihood (SUNIL), Science, Technology and Innovation (STI) Hubs, Scheduled Caste/Scheduled Tribe Cells in State Science and Technology Councils, and R&D projects for SC & ST beneficiaries.

The National Innovation Foundation (NIF), DST, has strengthen grassroots technological innovations and traditional knowledge systems by scouting, supporting and scaling up innovations developed by grassroots innovators. NIF facilitates technology validation, intellectual property protection, and promotes the diffusion of sustainable grassroots innovations to address socio-economic and environmental challenges.

The Council of Scientific and Industrial Research (CSIR) under its National Laboratory Schemes has supported its constituent laboratories for carrying out R&D, including promotion of technology transfer, rural innovation, start-ups and science-driven livelihood generation across regions.

Further, a project entitled "Creating livelihood opportunities in rural areas through CSIR technologies using UBA-VIBHA Network" was executed by CSIR in collaboration with Unnat Bharat Abhiyan and Vijnana Bharati (VIBHA). In this project, various technology showcasing events and training programs based on CSIR technologies were organized across various states of the country. Approximately 3400 participants, including persons from SHGs/NGOs and farmers from various parts of the country, attended these showcasing events and training programmes in offline and online mode.

Department of Biotechnology (DBT) has implemented the Biotech-KISAN programme, a national farmer-centric mission of DBT to empower farmers through technology transfer and region-specific technology demonstrations. Further, the Biotechnology Industry Research Assistance Council (BIRAC), DBT has implemented various schemes and programs of national scale to support startups, innovators, incubation centres, universities, academic institutions, and industry. BIRAC also oversees national programmes aimed at promoting technology transfer, rural innovation, start-ups, and science-driven livelihood generation across regions of the country, thereby enabling inclusive growth of the biotechnology innovation ecosystem.

(b) to (c): CSIR–Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP), Lucknow and CSIR–Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu implemented a project titled "Demonstration of Cultivation, Processing and Value Addition of Aromatic Crops in Bundelkhand Region" during 2017–2021, covering 14 districts of Bundelkhand, including Panna and Khajuraho (Madhya Pradesh). The project was carried out in collaboration with the Fragrance and Flavour Development Centre (FFDC), Kannauj and Bundelkhand University, Jhansi. Under this initiative, over 100 training and awareness programmes were organized, benefiting more than 8,000 farmers and rural youth. Approximately 2,000 acres were brought under cultivation of aromatic crops such as lemongrass, palmarosa, basil and vetiver, and 25 field distillation units were installed for essential oil production. Additionally, 1,000 rural women were trained in producing incense sticks and fragrance cones from distillation waste. The programme facilitated technology transfer and science-based livelihood generation in the Bundelkhand region and led to the establishment of more than 10 enterprises in the medicinal and aromatic plants ecosystem.

Further, CSIR–National Institute of Science Communication and Policy Research (CSIR-NIScPR) hosts the Kisan Sabha App in collaboration with its industrial partner. The platform enables farmers, transporters and mandi dealers to connect digitally for the marketing and sale of agricultural produce. Through this platform, 236 farmers from Katni and Panna districts have registered.

(d) The schemes and programmes are implemented through nationwide calls for proposals, under which eligible institutions, universities, research organizations and innovators from all regions, including Madhya Pradesh, submit proposals under the respective schemes. The selection of projects is based on the merit and relevance of proposals received from eligible researchers, institutions, innovators and incubators.

The Government also encourages institutions from underserved and emerging regions to actively participate in national programmes related to innovation, incubation and technology translation, with the objective of expanding their geographical reach and strengthening regional innovation ecosystems

(e) Through various programs of DST, DBT and CSIR, efforts have been made to enhance technology translation, incubation support and science-based livelihood initiatives across the country. These include support for Inclusive Technology Business Incubators (iTBIs), technology demonstration projects, rural innovation programmes and biotechnology outreach initiatives, along with strengthened collaboration among government agencies, academic institutions and local organizations. These initiatives aim to facilitate the conversion of research outcomes into deployable technologies, enterprises and employment opportunities, thereby contributing to local economic development and livelihood generation in these regions.

*****