GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH

RAJYA SABHA UNSTARRED QUESTION NO. 2374

(ANSWERED ON. 20.03.2025)

EVALUATION OF SCIENTIFIC ACTIVITIES OF CSIR

2374. SHRI AJEET MADHAVRAO GOPCHADE:

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

- (a) whether the Central Government has implemented any strategies to evaluate scientific activities and address inefficient spending at research facilities under the Council of Scientific and Industrial Research (CSIR);
- (b) whether the Central Government has initiated any external evaluations to assess the measurable outcomes produced by the research conducted by all CSIR centres;
- (c) whether the Central Government has taken measures to encourage State Governments to utilize the research findings from all CSIR centres; and
- (d) whether the Central Government has pursued initiatives to generate revenue from the research conducted by all CSIR centres through technology transfer to the private sector?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) FOR THE MINISTRY SCIENCE AND TECHNOLOGY AND EARTH SCIENCES

(DR. JITENDRA SINGH)

(a) Yes, Sir. CSIR undertakes regular review of its R&D activities through designated Committees at the CSIR Hqrs level as well as its constituent laboratories. Outcome Review of CSIR Schemes of 2016 was carried out by the Saraswat Committee. CSIR has been making continued efforts to implement the recommendations of the Vijay Raghavan Committee for fostering stronger and meaningful linkages with the industry and other stakeholders. However, there is no inefficient spending at Council of Scientific and Industrial Research (CSIR) as CSIR is utilising major chuck of the allocated budgets for carrying out its R&D activities. The Budget Estimates, Revised Estimates and Actual spending's by CSIR for the last three Financial Years and the current year is as under:

(Rs. in Crore)

Year	B.E.	R.E.	Actuals
2021-22	5144.27	5233.72	5174.34
2022-23	5562.76	5874.09	5808.59
2023-24	5675.51	6141.51	6107.07
2024-25	6265.80	6303.45	5587.75*

^{*} Expenditure up to 28.02.2025

(b) Yes, Sir. CSIR has Performance Appraisal Boards (PABs) for its laboratories, besides having its Rules & Regulations and Bye-laws. The boards periodically assess the functioning, output and outcome of CSIR laboratories, review and appraise the performance of the national laboratory and provide advice to adopt corrective action, if any through advising the Advisory Board /Governing Body of the outcome of the review, suggest the remedial measures to improve the performance of the national laboratory and any other function as assigned by the Advisory Board /Governing Body.

In a recent effort, CSIR has merged two of its laboratories, namely the National Institute of Science Communication and Information Resources (NISCAIR) and the National Institute of Science, Technology and Development Studies (NISTADS), into one entity named National Institute of Science Communication and Policy Research (NIScPR). CSIR has also upgraded one unit, namely CSIR-Fourth Paradigm Institute (CSIR-4PI), to national laboratory status.

CSIR has been pursuing R&D activities through a thematic approach across project categories: CSIR-Fundamental Innovative Research for the Science of Tomorrow (CSIR-FIRST); Focused Basic Research (FBR); Niche Creating Projects (NCP); Fast track Translation (FTT); Fast Track Commercialization (FTC); and Mission Mode Project (MMP), besides lab-level programs. Dedicated External Monitoring Committees (comprising of eminent experts from Industry, Academia and Institutes) are in place for each of the Mission Mode Projects (MMP) supported by CSIR. Further, Dedicated External Monitoring Committees are in place for a bunch of FTT/FTC/FBR/NCP/ CSIR-FIRST project theme-wise. The Monitoring Committee is empowered to assess and recommend for foreclosing or dropping or modification in the components of the project, within the overall approved objectives and budget; including additional institutional/industrial partner(s), in the overall interest of the project; revising the funding support to any / or all implementing labs; and revising/extending the project duration, if necessary.

- (c) Yes, Sir. Measures being taken to encourage Stakeholders including the State Government to utilize the research findings of CSIR laboratories/ institutes (Annexure-I). CSIR is deploying its knowledge base/technologies in various states to benefit the masses through licensing/transfer of its knowledge base/technology through i) Media (Social, Print, Electronics, Webinar) ii) through industries and iii) through Memorandum of Understandings (MoUs) and Agreements with State Governments for deploying its knowledge base/technologies.
- (d) Yes, Sir. CSIR constituent laboratories/ institutes have been generating revenues from the research conducted through technology transfer to the private sector. Business Development Group (BDG) has been functioning at each of the constituent laboratories/ institutes of CSIR for this purpose.

Measures taken to encourage Stakeholders including State Government to utilize the research findings of CSIR laboratories/ institutes

Technologies and products developed by CSIR laboratories are given the utmost popularity in order to reach to the common man. Various platforms, accessible to the general public, are used to popularise the technologies & products of CSIR at the laboratory level as well as at Headquarters level for Nation-wide reach of the technologies. The details are as follow:

i. Social media – CSIR and its laboratories maintain their social networking pages on various popular social networking sites such as Twitter, Facebook, LinkedIn and YouTube for instant showcase of various S&T activities and achievements of CSIR and also for LIVE coverage of different scientific related activities organised by CSIR. Any new development or successful accomplishment of technologies/ products are highlighted on these social media platforms for wider access and information of the general public.

Links to the social media channels of CSIR are:

https://twitter.com/CSIR_IND

https://www.facebook.com/INDIA.CSIR/

https://www.youtube.com/CSIRINDIA1942

- ii. Print Media CSIR uses various print media methods for spread of information on the development of its technologies and products. Some of the well-known print media tools are
 - Publishing of the CSIR Annual Reports; CSIR laboratories publishes their own Annual Reports.
 - CSIR's activities/new launches/ announcements/ technologies etc get regularly printed in local and nation Newspapers in English, Hindi and other regional languages. Online version of a special NEWS Bulletin named as "CSIR in Media: Weekly News Bulletin" is compiled and published taking clips available in print media as received from various CSIR labs and other sources like Google alert, Twitter, Facebook, etc. The published NEWS of CSIR are compiled on weekly basis and uploaded on the CSIR website.
 - Year-end reports on the achievements & technological development of CSIR and press release for CSIR's activities/new launches/ announcements/ technologies, etc., are submitted to Press Information Bureau to be made available to the general public.
 - CSIR also published a COVID Compendium titled *CSIR Technologies for COVID-19 Mitigation*. The compendium includes details of about 100 Covid-19 technologies categorised under diagnostics, drugs and vaccines, hospital assistive devices and PPEs, supply chain and other Covid-19 technologies. Salient technical features of each of the technologies, uses, the laboratory, and industry partner details are given.

All information is made available on the CSIR website for easy access and knowledge of the general public. Some links are given below for reference:

https://www.csir.res.in/about-us/annual-report

https://www.csir.res.in/news-bulletin

https://niscpr.res.in/periodicals/csirnews

- iii. Electronic Media CSIR makes jingles that get telecast on various Radio channels and other public platforms (such as at Expos).
- iv. Webinar series with LIVE Q&A sessions From time to time, based on the need of the hour, CSIR organises various webinar series to showcase the path-breaking products, technologies & achievements of CSIR to the public through social media platforms.

CSIR Success Story webinar series: During the celebrations of Azadi Ka Amrit Mahotsav and 80 Years of CSIR, a Success Story webinar series was launched by CSIR, focusing on key products & technologies developed by CSIR in its 80 years of journey. The webinar series invited participation of eminent personalities including Hon'ble Minister S&T, Dr Jitendra Singh; DG, CSIR; and Former DGs of CSIR, Padma Shri Vaidya Rajesh Kotecha; Professors from prestigious institutes, industry partners, stakeholders, beneficiaries and the eminent CSIR Directors, Former Directors, Heads and Scientists. Each webinar session includes Live Interaction with potential stakeholders including students and beneficiaries, Q&A sessions addressing queries from LIVE audience, and a Blogs on each success story uploaded on CSIR website.

 $\frac{https://www.youtube.com/watch?v=h5I-}{zWgOJIE\&list=PLxOObh_wALetBmNpZMlIBpZSIMw1GDle2}$

Other Technology showcase and Lab specific movies: CSIR, India YouTube webpage also encompass movies & seminars on various popular Missions of CSIR such as Aroma Mission and also on various laboratory specific technologies of CSIR, for knowledge and awareness of general public.

https://www.youtube.com/@CSIRINDIA1942/playlists

- v. 'One Week One Lab' (OWOL) Campaign: The 'One Week One Lab' campaign of CSIR is launched to focus on the utmost need of the present day to establish a resourceful connect of stakeholders (scientists/ entrepreneurs/ students/ industries/ start-ups/ society) for the advancement of the technologies and the progress of the society. The objective of the campaign was to showcase the diverse legacies, exclusive innovations and technological breakthroughs of the network of CSIR labs, working in diversified domains of Science & Technology. During the campaign, each of the 37 laboratories of CSIR showcased their technological breakthroughs every successive week. During the campaign each CSIR lab organized week long events including industry and start-ups meet, students connect, society connect, display of technologies, etc.
- **vi. 'One Week One Theme' (OWOT)** Campaign: After the success of the CSIR's 'One Week One Lab' (OWOL) campaign, CSIR has launched One Week One Theme (OWOT) campaign to showcase recent success stories of CSIR in different streams of science and technology with an aim to make innovation inclusive for all and to **create**

awareness among citizens about the progress and development in Labs, to benefit them giving them new avenues and opportunities for employment, empowering stakeholders such as **MSMEs**, **Startups**, **SHGs**, **scientists**, researchers by integration and collaboration with Industry. During the campaign, CSIR showcased success stories in different streams of science and technology theme-wise.

- vii. Expos, Seminars and Exhibitions CSIR participates in various Expos and Exhibitions ongoing throughout the year at National & International levels across the Nation for dissemination & awareness of Scientific achievements/ technologies & product development of CSIR. Scientists and technologies from CSIR interact with various stakeholders including the representatives of the State Government Departments visiting the exhibitions & expos including the general public/ students/ communities/ Start-ups etc to generate awareness and interest. CSIR also participated in the India International Science Festival (IISF) and showcased its technologies & products for awareness and popularisation of masses.
- **viii. Technology Websites of CSIR** CSIR has a Technology portal which lists all its TRL 6+ technologies, many of which have already been implemented/ commercialized. The portal also lists the success stories as also technologies for social Interventions for improving livelihood. Some Technology Compendium and links to CSIR's Technology showcase are provided below for ready reference.
 - CSIR Technology Showcase
 - Compendium of CSIR Technologies