

**GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY**

**LOK SABHA
UNSTARRED QUESTION No. 1062
TO BE ANSWERED ON 02/03/2016**

TRAINING IN BIO-TECHNOLOGY

1062. SHRI KIRTI VARDHAN SINGH:

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

विज्ञान और प्रौद्योगिकी मंत्री

- (a) whether training facility in bio-technology is available in India and if so, the details of these facilities, State-wise;
- (b) whether any centre have been established for Research and Development in Bio-technology and so, the details thereof;
- (c) whether the research conducted in these centres have been used in agricultural and other sectors and if so, the details thereof; and
- (d) whether the Government is contemplating to encourage private partnership in this regard and if so, the details of the benefits to be achieved through it?

ANSWER

MINISTER OF STATE FOR SCIENCE & TECHNOLOGY AND EARTH SCIENCES

(Y. S. CHOWDARY)

विज्ञान और प्रौद्योगिकी तथा पृथ्वी विज्ञान राज्य मंत्री

(वाई. एस. चौधरी)

(a) Yes, Madam. The Department of Biotechnology (DBT) is implementing an integrated human resource development programme to create trained manpower in the field of biotechnology by providing hands on experience to undergraduate science students under star college scheme, M.Sc./M.Tech. teaching programmes in 71 universities in the country, industrial training for B.Tech./M.Sc./M.Tech. biotech students and finishing schools for bridging skill gaps and enhancing employment prospects, re-training of existing faculty and scientists in advanced areas for upgrading their skills by conducting short term training courses. National Agri-Food

Biotechnology Institute (NABI), Mohali, Punjab an autonomous institute of Department of Biotechnology has setup a training facility in area of agriculture, food and nutrition biotechnology. The Regional Centre for Biotechnology, Faridabad has one of the major mandates of undertaking training in the important strategic and inter-disciplinary areas in biotechnology. The National Institute of Biomedical Genomics, Kalyani, West Bengal also undertakes short and long term training programmes in core areas of biomedical genomics. They also conduct summer and winter training schools periodically to enhance skill development. Skill development facility viz., SRM-DBT partnership platform for contemporary research, services and skill development in advanced life science technologies has been initiated" at SRM University, Kanchipuram, Tamilnadu. The state wise details of facilities are available on DBT website <http://www.dbtindia.nic.in> under menu Programes & Schemes > Programmes > Human Resource Development.

(b) & (c) Yes, Madam. DBT has established 26 Centres of Excellence in biotechnology research in the country. The specific goal of these Centres is to enhance the innovative ability of the institutions and investigators with well-developed research programmes in specific areas of biotechnology. These Centres of Excellence are carrying out research in advanced and cutting-edge sectors of biotechnology such as health, environment, energy including agriculture. These Centres have published research papers in various high impact factor journals of national and international repute and filed / obtained patents. Various research leads have been obtained in these programmes, which are being taken forward for developing crop varieties for abiotic and biotic stress tolerance.

(d) Yes, Madam. Innovation research grant is provided for product development through various Public Private Partnership schemes of Biotechnology Industry Research Assistance Council (BIRAC) a Public Sector Undertaking of DBT to young entrepreneurs, startups and small and medium enterprises (SMEs). Seed funding for discovery research is provided under the Biotechnology Ignition Grant (BIG) scheme of BIRAC. BIRAC also implements Small Business Innovation Research Initiative (SBIRI) and Biotechnology Industry Partnership Programme (BIPP) to foster innovation research and product development. A total of 509 R&D projects including 115 collaborative projects, 310 companies, 88 academic institutes and 170 entrepreneurs including 102 new start-ups have been supported till date. 28 affordable products/technologies, 26 early stage new technologies and 45 new Intellectual Property (IP) have been generated.
