

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

**LOK SABHA
UNSTARRED QUESTION NO. 2886
TO BE ANSWERED ON 03/08/2016**

PROMOTION OF BIO-TECHNOLOGY

2886. SHRI KESINENI NANI:
SHRI S. SELVAKUMARA CHINNAYAN :

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state: विज्ञान और प्रौद्योगिकी मंत्री

- TECHNOLOGY be pleased to state:
- (a) the current position of India in the field of bio-technology research and development in the world;
 - (b) the steps taken by the Government to encourage the bio-technology education and industry in India and the financial support provided by the Government for the same, if any;
 - (c) whether the Government has any proposal to set up an independent regulator for bio-technology including Genetically Modified (GM) crops through an executive order;
 - (d) if so, the details thereof and the reasons to set up such regulator through an executive order; and
 - (e) the special feature of the proposed independent regulator?

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) India's research performance in Pharmacology and Biotechnology indicates that India's scholarly output based on publication data is nearly 5 % of the world's total in 2014 and showing strong average growth of over 12 % annually.
- (b) Department is implementing an integrated human resource development program comprising of M. Sc./ M. Tech. teaching program, fellowships for doctoral and post doctoral research in biotechnology and Biotechnology Industrial Training program for post graduate students for skill upgradation. Ramalingaswami Re-entry Fellowships also provided to 50 scientists each year. The Department has implemented postgraduate teaching program in 71 universities, there is a provision of 275 and 125 fellowships per year in DBT-Junior Research Fellowship Program and DBT-research Associateship program, respectively. The Department is also providing 6 months industrial training to fresh B. E./B. Tech./M. Sc./ M. Tech biotechnology students for skill development and enhancing their employability in biotech industries. The total budget for Human Resource Development program in FY 2016-17 is INR 209 crores. The Department established Biotechnology Industry Research Assessments

Council (BIRAC) as a Section 8 (not for profit) Public Sector Enterprise in 2012 with the mandate to build the biotechnology innovation ecosystem in the country. Since its inception, BIRAC has provided funding to entrepreneurs, startups, SMEs and translational organizations to the tune of INR 677 crores which has helped innovation research to bring high quality and affordable products towards commercialization. BIRAC has several flagship programs for supporting startups and SMEs across the biotechnology innovation pipeline including funding (from ideation stage to commercialization), incubation, patent assistance, capacity building through training and mentoring including business and technical mentoring. The total budget from BIRAC in FY 2016-17 for startups and innovation research in industries is INR 120 crores.

(c, d & e) It is proposed to set up an independent regulator for bio-technology including Genetically Modified (GM) crops for which The Biotechnology Regulatory Authority Bill (BRAI) Bill, 2013 was introduced in XV Lok Sabha and was lapsed with the tenure of the same. BRAI Bill 2013 has now been revised taking into consideration recent developments in genetic engineering technologies for reintroduction through appropriate legislative process. Meanwhile, as an interim measure to implement the best practices contained in the BRAI Bill, establish a separate office dealing with biosafety issues it is proposed to of Genetically Engineered products within the existing regulatory framework under the Rules for the Manufacture, Use, Import, Export and Storage of Hazardous Micro-organisms/ Genetically Engineered Organisms or Cells (Rules, 1989) of the Environmental Protection Act (EPA), 1986. The proposed Office of Biotechnology Regulation will have an Inter-Ministerial Board represented by senior officials of concerned ministries for overall supervision along with strengthened risk assessment and management system through a functional unit of multidisciplinary scientists.
