

**GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA**

UNSTARRED QUESTION NO:1591
ANSWERED ON:15.07.2009
ROAD MAP FOR BIO-TECHNOLOGY
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Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) the details of road map prepared for the use of Bio-technology;
- (b) whether the Government has encouraged the application of Bio-technology in the field of health care, agriculture and industrial sector;
- (c) if so, the details thereof; and
- (d) the number of Biotech Parks and incubation centres functioning in the country and proposed to be established during Eleventh Plan, State-wise?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) SCIENCE && TECHNOLOGY AND EARTH SCIENCES(SHRI PRITHVIRAJ CHAVAN)

(a) The Department of Biotechnology, Government of India formulated a National Biotechnology Development Strategy which was announced in October, 2007. The Strategy was formulated after detailed discussion with various Stake holders, Scientists, NGOs, Policy makers, Civil Societies and Industries.

The National Biotechnology Development Strategy aims at creating such tools and technologies that address the problems of the largest section of the society, provide products and services at affordable prices and make India globally competitive in the emerging bio-economy. The basic goal of the National Biotechnology Development Strategy is to enable emergence of an ecosystem that promotes innovation. The Strategy provides for producing more world class researchers, establishing centres of excellence and interdisciplinary networks in the university system, strengthening technology transfer and patenting skills, promoting biotech clusters and parks, building a strong regulatory system, improving transnational movement of biologicals, building new institutes in a few key areas where there is deficiency and link international partnerships to national goals. The Strategy is a comprehensive road map for addressing cross-cutting issues related to human resource development, infrastructure strengthening, promotion of industry and trade and public awareness, and an action plan for specific sub-sectors. The strategic action plan will direct the future priorities and activities in different sectors of biotechnology.

(b)&(c) The Union Government has taken a number of steps to promote application of bio-technology in the field of health care, agriculture and industry sector. The Department of Biotechnology (DBT) established as an independent Department of Ministry of Science & Technology in 1986, has been given the mandate for promotion and development of biotechnology. Besides DBT, Department of Science and Technology, Council of Scientific and Industrial Research, Indian Council of Medical Research and Indian Council of Agricultural Research also support biotechnology research programmes. The main thrust of activities of DBT is on Promotion of application of bio-technology programmes, development of products/processes, promotion of public-private-partnership, Human Resource Development, enhancing capacity for technology transfer and commercialization, streamlining of regulatory mechanisms, effective management of intellectual property, creation of centres of excellence and strengthening of infrastructure. Research institutes, universities and voluntary organizations have been supported across the country. In the health sector, emphasis is on vaccine, diagnostics, biodrugs, implants and devices. In agriculture, emphasis is on drought, salinity, post harvest losses, nutraceuticals, biofortified feeds using marker assisted breeding and genetic modification where necessary.

(d) Four biotechnology parks supported by Department of Biotechnology, Government of India are presently functioning in the country. These are located in the States of Uttar Pradesh (Lucknow) and Andhra Pradesh (Hyderabad) and two in Tamilnadu (Chennai). There are also parks in Bangalore and Pune. New park is proposed at Mohali. Considering the importance of biotechnology parks for the growth of the biotechnology industry, Government plans to promote and support at least ten biotechnology parks by 2010, depending upon the feasibility of the proposals received from the State Governments. Proposals of Himachal Pradesh, Karnataka, Kerala, Assam and Gujarat have already been supported by the Government. The proposal from Orissa is in the planning/development stage by the State Government.