

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY
LOK SABHA

STARRED QUESTION NO. *469
TO BE ANSWERED ON 28/03/2018

Use of Biotechnology

*469. SHRI SANJAY DHOTRE:

SHRI RAHUL SHEWALE:

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

- (a) the initiatives taken by the Government to encourage the use of biotechnology in agriculture, animal science and healthcare sectors in the country along with the achievements thereof during each of the last three years and the current year, sector-wise;
- (b) the details of the funds provided by the Government to support the Research and Development Projects based on biotechnology in these sectors across the country during the said period, State/UT-wise;
- (c) whether a number of States have formulated their own biotechnology development strategy/policy due to lacklustre approach of the Government to promote biotechnology in such States;
- (d) if so, the details thereof and the reasons therefor along with the reaction of the Government thereto; and
- (e) whether the Government has provided guidance/support to such States in formulating their own biotechnology development strategy/policy and if so, the details thereof?

ANSWER

MINISTER FOR SCIENCE & TECHNOLOGY AND EARTH SCIENCES
(DR. HARSH VARDHAN)

(a), (b), (c), (d) & (e) A statement is laid on the Table of the House.

STATEMENT IN RESPECT OF LOK SABHA STARRED QUESTION NO. *469 TO BE ANSWERED ON 28/03/2018 REGARDING “USE OF BIOTECHNOLOGY”

- (a) The National Biotechnology Development Strategy 2015-20 launched by the Government has identified agriculture, animal science and healthcare as important sectors and the Department of Biotechnology has supported several programmes in these sectors and also initiated new programmes during last three years and current year.

The achievements of the Biotechnology sector in India during last three years and current year include following:

- Number of Publications: 10,537
- Number of Patent Application filed: 183
- Number of Technologies/Products developed and commercialized: 301
- Start-ups/Entrepreneurs supported: 350
- Students trained in Industrial Programme: > than 5000

The sector-wise achievements in agriculture, animal science and healthcare are:

Agriculture:

- A guideline on ‘Regulations and Guidelines on Biosafety of Recombinant DNA Research and Biocontainment, 2017’ was released.
- Biotech KISAN Scheme with a major impact on rural livelihood was announced in October, 2016. Under this programme, Hubs are being established in 15 agro-climatic zones across the country.
- As a major boost to the sericulture sector, the transgenic silkworm resistant to BmNPV infection has been developed. These hybrids would be a boon to the sericulturists of the country.
- Fifteen countries joined hands to address the ambitious project of decoding the wheat genome by sequencing 17,000 million bases. Indian Scientists contributed by decoding the Chromosome 2A.
- Four virtual India-UK joint centres for agricultural nitrogen were established.
- Two bacterial blight resistant Basmati rice varieties namely, Pusa Basmati 1728 and Pusa Basmati 1718 have been developed and released.

Animal Science:

- A new programme for Brucella free villages has been announced for implementation on pilot scale in 50 villages covering 10 States. 3 new brucella diagnostic kit launched.
- The Department of Biotechnology has initiated cattle genomics programme.
- A cocktail vaccine for poultry salmonellosis was developed.

Health:

- National Biopharma Mission was launched on 30th June, 2017. The Mission with a total budget of US\$250 million aims to bring Industry and Academia together to promote entrepreneurship and affordable product development.
- First indigenous Rota Virus Vaccine was launched in March, 2015. A new injectable vaccine that protects against all four dengue strains endemic to India are being developed. A 1-day Dengue Diagnostic Test was developed.

- The Pre-term Birth programme was initiated to promote a multidisciplinary research effort to predict & diagnose preterm birth (PTB) by enhancing the knowledge of the underlying pathophysiological mechanisms.
- Iron fortified rice: IIT Kharagpur has developed an indigenous process technology and pilot scale manufacturing unit for iron fortified rice with the support from DBT.

(b) During the last 4 years the Department has provided a total budget of Rs 3965.56 Crores to support R&D based projects across the country in different Universities/Institutes/Research Organizations. The State-wise details are available on link: http://www.dbtindia.nic.in/wp-content/uploads/State_wise-project.pdf

(c) to (e):

The Government of India announced the National Biotechnology Development Strategy in December 2015 with the major emphasis on Education, Research, Translation and Entrepreneurship. The Strategy clearly listed specific actions to be taken to achieve the target of US\$100 billion biotech industries by 2025. In the action plan it has been indicated that this strategy will be implemented in partnership with the State Governments.

During the last four years, States of Himachal Pradesh, Uttar Pradesh, Rajasthan, Gujarat, West Bengal, Assam, Odisha, Maharashtra, Telangana, Karnataka, Andhra Pradesh and Tamil Nadu have announced their State specific policies.

The Department of Biotechnology, Government of India is working closely with these State Governments in both formulation of policies and implementation of activities.