

GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE & TECHNOLOGY  
DEPARTMENT OF BIOTECHNOLOGY

LOK SABHA  
UNSTARRED QUESTION No. 2039  
TO BE ANSWERED ON 09/03/2016

INTERNATIONAL LINKAGES FOR RESEARCH

2039. SHRI. FAGGAN SINGH KULASTE:

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

विज्ञान एवं प्रौद्योगिकी मंत्री

- whether the Department of Biotechnology has taken steps to strengthen International Linkages for Research on Infectious Diseases and Vaccine Development;
- if so, the details thereof, country-wise;
- the details of research on Infectious Diseases as well as Vaccines developed with other countries so far;
- whether the Department of Biotechnology has also initiated the partnership proposal for research on human infectious diseases with an international body called Infect-ERA NET recently;
- If so, the details thereof and the response of the International body thereto; and
- the further steps taken/being taken by the Government to boost the research work on Infectious Diseases and Vaccine Development in the country?

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 has taken steps to strengthen International linkages for Research on Infectious Diseases & Vaccine Development.

(b) and (c) The country-wise details of the collaborative initiatives in the area of infectious diseases & vaccine development are as follows :

**USA:** The Department has made concerted efforts to strengthen the vaccine research and development with international linkages especially with USA through a bilateral programme called Indo-US Vaccine Action Programme (VAP) which is under implementation since July, 1988.

Under VAP several joint projects were implemented in the area of infectious diseases such as Rotaviral infection, Malaria, Dengue, HIV, Hepatitis, Leishmaniasis, Respiratory Syncytial Virus infection, Tuberculosis, Cholera etc.

Under INDO-US VAP, the vaccine called ROTAVAC® was developed through a project for development of Rotavirus vaccine, initially implemented at AIIMS, New Delhi and IISc, Bangalore in collaboration with CDC, Atlanta. This vaccine is the first indigenous live attenuated rotavirus vaccine developed manufactured in India by M/s Bharat Biotech International Limited. Under Dengue vaccine project at ICGEB, New Delhi, a promising candidate has been developed which is at pre-clinical stage.

**UK:** The Department of Biotechnology and the Research Councils, UK signed RCUK- DBT letter of intent to work together in Climate Change and Agriculture, Antimicrobial Resistance and Vaccine Development as

part of their joint grand challenges. Under Indo-UK Cancer Research Program, a vaccine for cancer treatment has been developed which is under Phase II clinical trials.

**South Africa:** Bilateral collaboration has been set up in 2011 between the two countries for HIV vaccine research.

**Netherlands :** Department and its subsidiary company the Bharat Immunologicals and Biologicals Ltd (BIBCOL) has signed a Memorandum of Understanding with the Institute for Translational Vaccinology (Intravacc) of the Kingdom of Netherlands on "Development of Vaccines". Intravacc and BIBCOL have agreed to partner with the aim of setting up of a measles-rubella vaccine plant for BIBCOL.

**Australia:** Projects have been supported in the area of infectious diseases & vaccine development.

**Brazil:** Under Indo-Brazil co-operation, projects have been supported in the area of Tuberculosis, Cancer, Leishmaniasis, Rota Viral infection & Antibiotic development.

**Sweden:** Joint projects have been supported on strategies against antibiotic resistance in *Mycobacterium tuberculosis* and *Pseudomonas aeruginosa* as well as new anti-infective therapies against tuberculosis.

**Canada:** An International Malaria Research Consortium for the development of novel classes of anti-malarials has been supported.

**Finland :** Joint projects have been supported on *Salmonella typhi* H2O test (TYPHOS), Simple and rapid platform for point-of-care immunoassays (SiRRPI) and Technology platform for simple and efficient production of recombinant antibodies (Tech-SEPPA).

**Denmark:** Projects have been supported for establishing immunological correlates of protection against malaria vaccine candidates using functional bioassays and proteomic deciphering of host-parasite interactions. (idMALVAC)

**EU:** New Indigo Program has been supported for structure/function studies of *Plasmodium falciparum* GMP synthetase & TBomics: an omics approach for diagnosing tuberculosis.

(d) & (e) Yes Madam. Department of Biotechnology has partnered with European Research Area Network Programme of European Union called Infect-ERA NET since last three years. Already three transnational calls have been issued.

(f) **The further steps taken/being taken by the Government to boost the research work on Infectious Diseases & Vaccine development in the country include :**

To boost the research work on vaccine development under Indo-US VAP, collaborative efforts are underway with DHR/ICMR for diseases such as dengue and tuberculosis.

DBT and International AIDS Vaccine Initiative (IAVI) entered into an MOU on 7<sup>th</sup> July, 2005, which has been further strengthened by addition of an agreement with THSTI. Under this agreement, the two institutions set up a joint Vaccine Design Program - HIV Vaccine Translational Research laboratory (HVTR) in 2012.

**Apart from this, the Department has a task force on Infectious Disease Biology to support Research & Development activities in important infectious diseases.**

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