

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF SCIENCE AND TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO.5456
TO BE ANSWERED ON 28/3/2018

RESEARCH TO BOOST INDIGENOUS TECHNOLOGY

†5456. SHRI RAM KUMAR SHARMA:

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

- (a) whether there is a need to expedite the research work in the country to give a boost to the economy by making foreign trade profitable;
- (b) if so, the reaction of the Government thereto;
- (c) whether India has ignored development of its original technology and has adopted foreign technology;
- (d) if so, whether the foreign technology is capital based while the indigenous technology is labour based which is necessary for the country like ours which has a large population;
- (e) if so, whether the Government has formulated any scheme to develop indigenous technology and to improve it; and
- (f) if so, the details in this regard?

ANSWER

MINISTER OF SCIENCE AND TECHNOLOGY, MINISTER OF EARTH SCIENCES AND MINISTER OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

(DR. HARSH VARDHAN)

विज्ञान और प्रौद्योगिकी मंत्री, पृथ्वी विज्ञान मंत्री और पर्यावरण, वन एवं जलवायु परिवर्तन मंत्री

(डा. हर्ष वर्धन)

(a) & (b): The Ministry of Science and technology has been strengthening the knowledge base, expediting research work in the country needed for the socio-economic development through its various programmes and schemes. The people and nation-centric thrust to science, technology and societal pursuits remains the prime focus of all the Departments under the Ministry. The Ministry through its constituent Departments has developed innovative technologies in some economically important sectors such as: drugs and pharmaceuticals; food & food processing; water; innovative farm machinery; housing & construction; infrastructure engineering including roads; glass & ceramics; agrochemicals; aromatic & medicinal plants; leather; petroleum & petrochemicals; mining, minerals & metals which are significantly benefitting the common people as well as Indian industry.

(c) & (d): The Government has laid down many policies and announced schemes from time to time that encourage the fruit of indigenous research reaching public/society at large and getting successfully commercialized. The Ministry is actively participating in schemes like Make in India, Start-up India, Stand-up India and Digital India etc which are aimed at taking fruits of indigenous research towards fulfilling defined economic & social aims.

Science for Equity, Empowerment & Development (SEED) Division, DST through its programmes/schemes provide opportunities to motivated scientists, technologists and field level/based S&T organizations to take up action-oriented and location-specific demonstration projects aiming at socio-economic development of primarily the rural population. This is realized through adoption/adaptation of indigenous/improved technologies to enhance quality-of-life through better livelihood opportunities and income generation primarily in rural settings and/or for underprivileged communities.

(e) & (f): The Department of Science and Technology is taking initiatives in the thematic areas of energy and water for research, technology and solutions. Two specific schemes Water Technology Initiative and Clean Energy Research Initiative have been formulated to develop indigenous research based technologies and also leverage international collaboration to further improve upon developed technologies.

Also under the Technology Development Programmes of DST, nearly 100 projects are supported every year to develop the technologies in the area of Advanced Manufacturing, Waste Management, and Devices for Agriculture, Textile, Analytical and Biomedical Applications.

Technology Development Board under DST, provides equity capital, soft loan, grant or any other financial assistance to industrial concerns and other agencies primarily for "Development & Commercialization of indigenous technologies". Since inception, TDB has emerged as a unique techno-financial institution that finances technology-based projects encouraging new ideas from large, medium, small and micro-enterprises even at the risk of failures. TDB has funded more than 400 projects in all sectors pan India with about 300 successfully commercializing the indigenous technologies.

Patent Acquisition and Collaborative Research & Technology Development (PACE) scheme under DSIR, focuses on development and demonstration of innovative technologies traversing the journey from proof-of-concept or laboratory stage to pilot stage, ready to be launched for commercialization by industries and institutions, either stand alone or in collaboration.