Steps to improve indigenous technological development

1241. SHRI TIRUCHI SIVA: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) the details of R&D expenditure over the last three years;
- (b) whether Government is aware that electronics imports are a measure of lack of technological self-sufficiency;
- (c) whether Government is taking any steps to improve indigenous technological development in terms of electronics; and
 - (d) if so, the details thereof and if not, the reasons therefor?

THE MINISTER OF SCIENCE AND TECHNOLOGY (DR. HARSH VARDHAN): The R&D expenditure over the last three years for Ministry of Science and Technology is as follows:—

(₹ in crores)

Department	EXP2016-17		EXP 2017-18	EXP2018-19
	Plan	Non-Plan		
DST	3835.33	490.26	4635.22	5043.68
DSIR	2287.83	1763.84	4618.61	4568.45
DBT	1874.60	20.90	2231.42	2379.10
Total	7997.76	2275.00	11485.25	11991.24

- (b) to (d) Steps taken by the Government for promotion of domestic electronics manufacturing through Ministry of Electronics and Information Technology (MeitY):-
 - (i) Modified Special Incentive Package Scheme (M-SIPS) provides financial incentives to offset disability and attract investments in the electronics manufacturing sector. The scheme was open to receive applications till 31.12.2018 for new projects as well as expansion projects.
 - (ii) The Electronics Manufacturing Clusters (EMC) Scheme was notified to provide financial support for creation of state-of-art infrastructure for electronics manufacturing units. The scheme was open for receipt of application for a period of 5 years, i.e., upto 21.10.2017. Further period of 5 years is available for

- disbursement of funds for the approved applicants. Under the scheme, approval has been accorded for setting up of 20 Greenfield EMCs and 3 Common Facility Centres (CFCs) in 15 States across the country.
- (iii) Tariff Structure has been rationalized to promote domestic manufacturing of electronic goods, including, *inter-alia*, Cellular mobile handsets, Televisions, Electronic components, Set Top Boxes for TV, LED products and Medical electronics equipment. To promote domestic value addition in mobile handsets and their parts/components manufacturing, a Phased Manufacturing Programme (PMP) has been notified. As a result, India has rapidly started attracting investments into this sector and significant manufacturing capacities have been set up in the country during the past four years. The manufacturing of mobile handsets and their parts/components has been steadily moving from Semi Knocked Down (SKD) to Completely Knocked Down (CKD) level, thereby progressively increasing the domestic value addition.
- (iv) As per extant Foreign Direct Investment (FDI) policy, FDI upto 100% under the automatic route is permitted for electronics manufacturing, subject to applicable laws/regulations; security and other conditionalities.
- (v) For promotion of exports in the sector, Merchandise Exports from India Scheme (MEIS) and Export Promotion Capital Goods (EPCG) Scheme are available under the Foreign Trade Policy, 2015-20. MEIS offers export incentives so as to offset disabilities of manufacturing. Zero duty EPCG scheme allows import of capital goods at zero customs duty, subject to specified export obligation.
- (vi) The import of used plant and machinery having a residual life of at least 5 years for use by the electronics manufacturing industry has been simplified through the amendment of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, vide Ministry of Environment, Forest and Climate Change Notification dated 11.06.2018.
- (vii) Notified capital goods for manufacture of specified electronic goods are permitted for import at "Nil" Basic Customs Duty.
- (viii) The Department of Revenue vide Notification No.60/2018-Customs dated 11.09.2018 has amended the Notification No.158/95-Customs dated 14.11.1995, relaxing the ageing restriction from 3 years to 7 years for specified electronic goods manufactured in India and re-imported into India for repairs or reconditioning.

- (x) In order to ensure safety of Indian citizens by curbing import of substandard and unsafe electronic goods into India, MeitY has notified "Electronics and Information Technology Goods (Requirement of Compulsory Registration) Order, 2012" for mandatory compliance. As per the provisions of the order, the manufacturer has to get the product tested in laboratories recognized by Bureau of Indian Standards (BIS), take registration from BIS and put the registration mark on the product. 44 product categories have been notified under the order.
- (x) The National Policy on Electronics 2019 (NPE 2019) has been notified on 25.02.2019. The vision of NPE 2019 is to position India as a global hub for Electronics System Design and Manufacturing (ESDM) by encouraging and driving capabilities in the country for developing core components, including chipsets, and creating an enabling environment for the industry to compete globally.
- (xi) Electronics Development Fund (EDF) has been set up as a "Fund of Funds" to participate in professionally managed "Daughter Funds" which in turn will provide risk capital to companies developing new technologies in the area of electronics, nano-electronics and Information Technology (IT). This fund is expected to foster R&D and innovation in these technology sectors.
- (xii) Ministry of Electronics and Information Technology (MeitY) provides grant-in-aid support to institutes of higher learning like IITs, IISc, Central Universities and R&D Organizations to conduct research in identified thrust areas. These research programmes are aimed to deliver proof of concept, technology/product development and transfer of technology. These research programmes also result in generation of specialized manpower to support "Make in India".
- (xiii) Indian Conditional Access System (iCAS) has been developed in Public-Private Partnership (PPP) mode to promote indigenous manufacturing of Set Top Boxes (STBs). The implementation of iCAS in the cable networks is underway.
- (xiv) An Electropreneur park has been set up in New Delhi for providing incubation for development of ESDM sector which will contribute IP creation and Product Development in the sector.
- (xv) National Centre of Excellence in Large Area Flexible Electronics (NCFLEX) has been set up in IIT-Kanpur with the objectives to promote R&D; Manufacturing; Ecosystem; Entrepreneurship; International Partnerships and Human Resources and develop prototypes in collaboration with industry for commercialization.

(xvi) National Centre of Excellence for Technology on Internal Security (NCETIS) has been set up at IIT-Bombay with the objective to address the internal security needs of the nation on continuous basis by delivering technology prototypes required for internal security and to promote domestic industry in internal security.

- (xvii) Centre for Excellence on Internet of Things (IoT) has been set up in Bengaluru, jointly with NASSCOM.
- (xviii) An Incubation centre with focus on medical electronics has been set up at IIT-Patna. A fabless chip design incubation centre has been set up in IIT Hyderabad to incubate start-ups in semiconductor design and to provide one-stop service to start-ups intending to enter this space.
 - (xix) A Centre of Excellence (CoE) on FinTech at STPI Chennai has been set up to provide infrastructure, resources, coaching/mentorship, technology support and funding to emerging start-ups in the FinTech sector through a collaborative approach including M/s intellect design as industrial partner, NPCI, UIDAI and Partner Banks as Yes Bank, PayPal, HSBC, IIT Chennai as knowledge partner and TiE Chennai to provide industrial connect.
 - (xx) An IoT OpenLab –a Centre of Excellence (CoE) for Internet of Things in partnership with Arrow Electronics at STPI Bangalore has been set up to provide academic and business mentoring of the startups in the IoT emerging technology area for developing products and/or services around IoT.
 - (xxi) An ESDM Incubation Centre has been set up at Bhubaneswar with the objective of creating a holistic eco-system to promote ESDM innovation, R&D and create Indian intellectual property in the eastern region of the country.

Ministry of Science and Technology is also supporting Research and Innovation for application of electronics in specified areas by providing funding support to scientists researchers, start-ups and industries.

Identification and development of tourist spots under Central schemes

1242. SHRI D. KUPENDRA REDDY: Will the Minister of TOURISM be pleased to state:

(a) the details of tourist spots in Karnataka identified and developed under Central schemes, so far;