GOVERNMENT OF INDIA MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY LOK SABHA

UNSTARRED QUESTION NO. 2776

TO BE ANSWERED ON: 06.08.2025

EMPLOYMENT GENERATION FROM SETTING UP OF SEMICONDUCTOR UNITS

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Will the Minister of ELECTRONICS AND INFORMATION TECHNOLOGY be pleased to state:

- (a) the details of opportunities provided directly or indirectly by the Production Linked Incentive Scheme launched to promote electronics manufacturing;
- (b) whether the Government is running special schemes to provide employment opportunities to the youth in rural areas through digital literacy and skill training associated with Information Technology (IT);
- (c) whether there is a possibility of employment generation from setting up of semi-conductor and chip production units;
- (d) if so, the sites proposed along with the details of estimated employment in numbers likely to be generated; and
- (e) whether the Government intends to give new incentives in sectors like start ups, Digital India and Artificial Intelligence so that more youths can get employment and if so, the schemes proposed in this regard?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY (SHRI JITIN PRASADA)

(a): Driven by Prime Minister's vision of Make in India and Atmanirbhar Bharat, India has emerged as a global hub for electronics manufacturing. The remarkable growth of electronics goods production and export can be seen as follows:

#	2014-15	2024-25	Remarks	
Production of electronics goods (Rs)	1.9 Lakh Cr	11.3 Lakh Cr	Increased ~6 times	
Export of electronics goods (Rs.)	38 thousand Cr	3.27 Lakh Cr	Increased 8 times	
Mobile manufacturing units	2	300	Increased 150 times	
Production of mobile phones (Rs.)	18 thousand Cr	5.45 Lakh Cr	Increased 28 times	

Export of mobile phones (Rs.)	1,500 Cr	2 Lakh Cr	Increased 127 times
Mobile phone imported (units)	75% of the total demand	0.02% of the total demand	

Industry estimates that the value addition for electronics manufacturing in India has increased substantially over the years.

This achievement is a result of policy initiatives and reforms undertaken by the Government in the last 11 years. Some of these are as follows:

- Production linked incentives (PLI) for large scale electronics manufacturing
- Production linked incentives (PLI) for IT hardware
- Electronics Manufacturing Clusters (EMC and EMC 2.0) Scheme
- Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS)
- Public Procurement (Preference to Make in India) Order 2017 to prioritize domestically manufactured products in public procurement
- Allowing 100% FDI in electronics manufacturing, subject to applicable laws/regulations

PLI Scheme for Large Scale Electronics Manufacturing & IT Hardware

- India has transformed itself from a net importer to a net exporter of mobile phones.
- India is now the second largest mobile manufacturing country in the world.
- PLI Scheme has significantly boosted investment, production, exports, and job creation in India's electronics sector as indicated in the table below:

PLI Schemes for Large Scale Electronics Manufacturing and IT Hardware			
Cumulative Investment Attracted	₹13,107.2 Cr		
Cumulative Production Achieved	₹8,56,947 Cr		
Exports	₹4,65,809 Cr		
Additional Employment Generated	More than 1.35 lakh direct jobs (till June 2025)		

As per industry estimates, each direct job leads to creation of three indirect jobs in the economy.

FDI in electronics manufacturing

- More than 4 billion dollars FDI in the field of electronics manufacturing in last 5 years (i.e. since FY 2020-21).
- Nearly 70% of this FDI is contributed by the beneficiaries of PLI Scheme.
- (b): Government is implementing a special scheme to provide employment opportunities to youth in rural areas through digital literacy and skill training in Information Technology (IT).

FutureSkills PRIME program is an collaborative initiative of MeitY and National Association of Software and Service Companies (NASSCOM) aimed at making India a cutting-edge digital talent nation. Key features are:

- Skilling, reskilling, and upskilling in emerging technologies such as Artificial Intelligence, Big Data Analytics, IoTs, Cyber Security, Blockchain, AR/VR, etc.
- Courses are developed in the consultation with industry to align with actual employment needs
- Portal can be accessed anytime-anywhere to earn skill certificates in line with their aptitude and aspirations
- Accessible online at https://futureskillsprime.in/

Under the FutureSkills PRIME programme, so far, more than 22.9 lakh candidates have registered on the portal, out of which there have been 13.8 lakh+ candidates enrollments. In addition 18,785 Government officials, 2,367 trainers and 19,929 students (under 208 Bootcamps) have been trained through CDAC and NIELIT centres.

(c) and (d): India's semiconductor strategy is comprehensive. It aims to develop a complete ecosystem, ranging from design, fabrication, assembly, testing, packing, and manufacturing.

There is a significant potential for employment generation from the setting up of semiconductor and chip production units in the country. The strategy is aligned with the vision of Prime Minister Shri Narendra Modi for *Atmanirbhar Bharat* and *Make in India, Make for the World*. It builds upon India's strong base in chip design talent.

In line with this vision, the Government of India launched the Semicon India Programme in 2022 with an outlay of ₹76,000 crore.

Under this programme, six semiconductor manufacturing projects have been approved with a cumulative investment of approximately ₹1,55,000 crore. These projects are expected to generate over 27,000 direct job opportunities, especially in skilled roles, depending on factory automation levels.

Further, as semiconductor industry is a foundational industry, these units are expected to have a cascading effect on employment generation in the other sectors and the supply chain down the line. Additionally, this sector is expected to generate indirect employment through the supply chain and other ancillary sectors.

Training/skilling initiatives of Government of India aiding employment generation:

- Over 44,000 engineers trained at the SMART Lab, NIELIT Calicut; 1 lakh target.
- AICTE has introduced new curriculum for VLSI Design & IC manufacturing.
- EDA tools provided to 350+ universities and startups, benefiting 45,000+ students
- Chip design support: 22 start-ups supported under Design Linked Incentive (DLI) scheme
- MoUs with USA, Japan, EU, Singapore, IBM and Purdue University. Industry leaders like Applied Materials and LAM Research have also setup research, validation and workforce development centers.

Successful tape-out of 20 chips belonging to 17 institutions from SCL, Mohali in the first phase demonstrates India's capability of end-to-end chip design and fabrication.

(e): To encourage the innovation led startup ecosystem in Electronics and ICT domain, MeitY has initiated startup centric schemes, namely, Technology Incubation and Development of Entrepreneurs (TIDE 2.0) Scheme and Gen-Next Support for Innovative Startups (GENESIS) Scheme.

These schemes respectively aim to promote tech-based entrepreneurship through financial and technical support to incubators and strengthen the startup ecosystem in Tier-II and Tier-III cities across India.

Further, Government has launched IndiaAI Mission in March 2024 with a vision to position India as a global leader in artificial intelligence by focusing on seven foundational pillars:

- IndiaAI Compute Capacity: Itaimsto provide high-end compute power (GPUs) to all, including MSMEs and startups, at an affordable cost.
- IndiaAI Foundation Models: To develop India's own Large Multimodal Models (LMMs) trained on Indian datasets and languages. This is to ensure sovereign capability and global competitiveness in generative AI.
- AIKosh: To develop large datasets for training AI models. AIKosh is a unified data platform integrating datasets from government and non-government sources.
- IndiaAI Application Development Initiative: To develop AI applications for India specific challenges in sectors such as climate change and disaster management, healthcare, agriculture, governance, and assistive technologies for learning disabilities.
- IndiaAIFutureSkills: To develop AI skilled professionals in India by increasing the number of graduates, post-graduate and PhDs in AI domain. It also envisions setting up Data and AI Labs in Tier 2 and Tier 3 cities across India.
- IndiaAI Startup Financing: To provide financial assistance to AI start-ups.
- Safe & Trusted AI: To balance innovation with strong governance frameworks to ensure responsible AI adoption

These initiatives collectively reduce early-stage financial constraints, accelerate product development, and open up global market access for AI startups.

With improved access to compute infrastructure, datasets, and mentorship, startups can scale capacity and output, leading to higher job creation in deeply technical and development roles while ensuring participation from Tier-2/3 cities and smaller towns.
