

GOVERNMENT OF INDIA  
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 5170**  
TO BE ANSWERED ON: 24.07.2019

**ARTIFICIAL INTELLIGENCE**

**5170                      SHRI M.K. RAGHAVAN:**

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

- (a) whether the Government is aware that Artificial Intelligence(AI) is gaining traction across the globe including India in various spectrum including industry, education, health and others, if so, the details thereof and the reaction of the Government thereto;
- (b) whether this has affected the human efficiency and increased artificial work efficiency and establishes the underlying fear that AI would take over most of the jobs, if so, the details thereof and the reaction of the Government thereto;
- (c) whether a recent World Economic Forum (WEF) report has estimated that nearly 50 per cent of the full-time workforce of companies would shrink over the next few years and if so, the details thereof and the reaction of the Government thereto; and
- (d) whether it has also been estimated that there would be a job loss of seven million by 2032 and if so, the details thereof and the reaction of the Government thereto?

**ANSWER**  
**MINISTER FOR ELECTRONICS AND INFORMATION TECHNOLOGY**  
**(SHRI RAVI SHANKAR PRASAD)**

(a): Yes, Sir. Government is aware that Artificial Intelligence is emerging technology having critical impact on various sectors. The technologies relating to Artificial Intelligence (AI) such as machine learning, big data analytics, image/speech recognition etc. are evolving at a fast pace and are finding increasing applications. In order to take stock of the implications of Artificial Intelligence on Information Technology and to coordinate work in the domain of Artificial Intelligence, a brainstorming session on Artificial Intelligence (AI) for Creating Ecosystem and Policy Framework was held under the Chairmanship of Hon'ble Minister Shri Ravi Shankar Prasad on 18<sup>th</sup> January 2017 with the participation of experts from Academia, Industry and Government. As an outcome of the brainstorming session four committees of experts from Academia, Industry and Government were constituted to look into the following areas:

- I. Platforms and Data for AI
- II. Leveraging AI for identifying National Missions in Key sectors
- III. Skilling and re-skilling
- IV. Cyber Security, safety, legal and ethical issues.

The committees identified five sectors that are envisioned to benefit the most from AI in solving societal needs: a) Healthcare, b) Agriculture, c) Education, d) Smart Cities and Infrastructure, and e) Smart Mobility and Transportation. The recommendations of the committees have gone onto formulation of 'National Programme on Artificial Intelligence'.

(b), (c) and (d): As per NASSCOM (National Association of Software and Services Companies), the critical requirement for optimizing the anticipated impact of the 4<sup>th</sup> Industrial Revolution / Digital 4.0 is dependent on the availability of the requisite talent with the relevant knowledge, skills and applications with respect to the Digital/Next-Gen Technologies. It is a fact that in India, just as in the global scenario, IT professionals need relevant up-skilling in these 'Digital Technologies' like Artificial Intelligence & Big Data Analytics, Internet of Things, Cloud Computing, Cyber Security, Social & Mobile, Robotics and Process Automation, Augmented/Virtual Reality, 3D-Printing/Additive Manufacturing), Blockchain etc. NASSCOM research has articulated an up-skilling requirement of 30%-50% of its existing work force of 4 Million.

Keeping the above in view, an online FutureSkills platform for B2B skilling was created by NASSCOM (<http://future-skills.nasscom.in/>) which was launched by the Hon'ble Prime Minister on 19.02.2018. MeitY has also signed a Memorandum of Understanding with NASSCOM to collaborate and strengthen their cooperation in the field of skill development particularly with respect to the re-skilling/ up-skilling imperatives in areas of new and emerging technologies, with Government acting as an enabler/facilitator.

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